THE LANCET.

VOL. I.] LONDON, SATURDAY, DECEMBER 5, 1840. [1840-41.

LECTURES

ON THE

ORGANS OF REPRODUCTION IN THE ANIMAL KINGDOM.

DELIVERED IN THE ROYAL COLLEGE OF SURGEONS, LONDON.

BY PROFESSOR OWEN, F.R.S.

LECTURE XVII.—MAY 28, 1840.

In tracing the generative apparatus through all its variable phases of complication and improvement, from the lowest to the highest beings in the animal scale, it will be seen that fecundity diminishes in an inverse ratio with the increase of intelligence. That where the latter quality is at a low ebb, and is incapable of supplying the necessary resources for the protection of the offspring, the young are extremely numerous. And that, on the other hand, where nature has bestowed an ample provision of intellectual capacity, which is capable of being applied to the wants and defence of the offspring, the number is diminished in equal proportion.

In fishes the ovary exists in its utmost simplicity, and produces myriads of ova; many of which must be lost, or become the food of other animals. When once expelled from the peritoneal canals, they are wholly uncared for by the parent. In the Crocodile, where fecundation is ensured by internal impregnation, the ovary is smaller, but the ova are yet numerous. They are deposited by the mother in the sand, and left to the warmth of the sun to become hatched. If the parent ever return to the spot where they have been laid, it is only to intercept the young in their passage to the river, and devour them. Birds, on the other hand, are remarkable for their intelligence and sagacity, and for the numerous arts which they adopt for the protection of their ova and their young. It is in them that the first simplification of the generative organs is observed; a diminution of the internal apparatus, no less in importance than the abrogation of the entire half of the essential organs.

AVES.—It has already been seen, that in the Crocodile the ovaria are small, the oviducts convoluted and simple, without any uterine portion, and that they terminate in the cloaca, one on each side. This structure may be considered as the type of birds. In the Chick there are two ovaries and two oviducts. At the earliest period that the Chick can be examined, there will be found in the lumbar region of the abdomen two organs, which represent the generative and urinary apparatus; these are the temporary or deciduous kidneys, the corpora Wolffiana. From the posterior part of these bodies the kidneys are developed, and from the anterior the ovaries. After a short time the right ovary remains stationary, and preserves its embryo condition during the whole of life. The left, on the contrary, goes on increasing to the adult age. While these organs are yet in their embryonic stage, four tubular cæci are produced from the cloaca, and proceed inwards towards the abdomen. The two on the left side are continued upwards to the left ovary and kidney, and constitute the oviduct and ureter: of those of the right side, that which represents the ureter, alone reaches its corresponding gland; the remaining tubulus, the rudimentary oviduct, retains its embryonic condition throughout life, or is subsequently absorbed. Sometimes it may be discovered in the adult.

The *ovarium* of birds consists of a thin and compressed layer of cellular tissue, which constitutes the parenchyma or stroma of the organ. This structural tissue is invested, first, by a thin vascular layer, then by a thin fibrous membrane, and, thirdly, by the peritoneum. The surface is at first smooth; it then becomes tuberculated, by the formation of numerous closed cells or vesicles. In several of these vesicles the first rudiment of the ovum is shortly developed. The large size of the egg of the bird has reference to the length of time that the embryo must exist within the shell, deprived of all communication with the mother, and the extent of development which is required at the moment of birth. The ovary is situated in front of the left kidney, and in close contact with the inferior vena cava.

The vesicles of the ovary, progressing in their growth, gradually project from the ovarium, pressing before them the coats of

that organ, until at last they are connected with it only by a slight pedicle: the ovary at this period presents a racemose appearance, and is not unlike a bunch of grapes of various size. The capsule, which incloses the vesicle or yolk, is at this period composed of the three layers of the ovarium, and is called the *calyx*, the pedicle is the *petiolus*. The calyx is very vascular, excepting at a broad line which is altogether deficient in vessels, and is named the *stigma*. It is this part which gives way when the yolk bursts from the calyx; the calyx then becomes collapsed, and is eventually absorbed. There can be therefore in the ovarium of the fowl, nothing analogous to the corpus luteum of higher animals. In the raptorial birds there is almost invariably a distinct right ovarium, but it is much smaller in size than the left.

The *oviduct* is of large size, much convoluted, and becomes thicker in its coats towards the lower part, and terminates in the cloaca. It commences with a wide slit, without any trace of a fimbriated portion; and at its lower part, near to the cloaca, is dilated into a thick glandular sacculus, which secretes the shell, and is therefore called the *calcifying segment*, and by some the uterus. The yolk with its inclosing membrane is received by the mouth of the oviduct after its escape from the calyx, and during its course along the duct is surrounded by the albumen; it is here also that the *chalazæ* are formed. Upon reaching the calcifying segment, the whole is surrounded by the hard shell and its membrane. If the mucous membrane of the oviduct be examined beneath the microscope, immediately after killing the bird, the small particles contained in the water in which it is immersed, will be seen to be put in motion by the action of the numerous vibratile cilia with which its entire surface is covered.

The oviduct having to exercise considerable pressure upon the ova, as well as to resist their weight, is provided with two strong *ligaments*, the superior and inferior, which undergo a remarkable change at the period of laying, and become strongly muscular. The inferior ligament is cruciform in its dispositions, and is attached to the anterior surface of the calcifying segment. The superior ligament is the strongest and most important; it is attached to the last rib but one, near to its head; is analogous to the broad ligament of mammiferous animals, and forms a kind of mesentery to the duct, which has been named *mesometra*.

In water birds and in the struthious genera, where it was observed that a penis existed in the male, a rudimentary organ of the same kind, the clitoris, is found in the female, encircled by its peculiar spiral groove.

Mammalia.—In passing from birds to mammiferous animals, no violent transition will be found to exist, the more particularly if the class be left with the consideration of those genera in which both ovaries are present, the right being merely somewhat smaller than the left. This structure naturally leads to the disposition of the generative apparatus in the Monotremata.

In the Ornithorynchus paradoxus, there are two ovaria, the right being smaller than the left. The oviduct is long, and disposed in transverse parallel convolutions, like that of birds. But there is here, for the first time, a distinction in the form of the oviduct, which admits of its division into a Fallopian and an uterine portion. The two oviducts terminate separately on each side of the urethral opening. The urethro-sexual canal passes through an extremely narrow pelvis, which would be incapable of transmitting a body of large size, and terminates in the cloaca, near to the opening of the rectum. In front of the cloaca, and projecting into it by its extremity, is the sheath containing the clitoris. Another generative peculiarity is seen upon the hind legs of these animals; it is a small depression of the integument in the situation occupied by the spur in the male. In the young male there is also a depression upon this spot, and at its bottom a small rudimentary spur, which grows to a considerable size. In the young female a spur also exists at the bottom of the cavity, but it retains its rudimentary form throughout the life of the animal.

As yet, no vagina, that is, no canal, leading especially to the uterus, and distinct from the cloaca, has been observed. In animals higher in the scale, there will be found two ovaries, two Fallopian tubes, two uteri, more or less blended until they form one single cavity, a vagina, an urethro-sexual canal, a clitoris, and a hymen.

The *ovary* always occupies its original position within the abdomen; it consists of a cellulo-fibrous stroma, more dense than in birds, inclosed in a thin, vascular membrane, external to which is first a fibrous and then a serous layer. In relation to the size of the animal, this organ is much smaller than in the preceding classes; it is oblong and compressed in form, and the surface is quite uniform. In the different classes of animals, however, it presents some interesting *modifications*. In Marsupiata, as in the Wombat, the ovary is racemose in appearance, as in the bird. In Rodentia, as in the Rabbit, and in some Pachydermata, as the Hog, the same character is apparent, and the ova are formed within calices. Generally, the ovary is situated in the posterior fold of the broad ligament of the uterus: but in the Bitch there is no part resembling that organ to be perceived. It is here inclosed in a distinct bag of the peritoneum, a tunica vaginalis, which receives the extremity of the Fallopian tube, and communicates with the general cavity of the abdomen only by means of a small and constricted opening. The same disposition is observed in the Seal. In some quadrupeds, and in the earlier stages of the Whale (Balæna), the ovarium is elongated,

and presents upon its surface numerous cerebriform convolutions, like that of fishes.

In the *oviduct*, or Fallopian tube, several remarkable *modifications* are observed. This organ is truly the ovi-duct, as serving the purpose of transmitting the ovum from the ovarium to the uterus, or to the cloaca; the term Fallopian tube is bad, and can be compared only with some of the absurd and unscientific terms which are used in veterinary anatomy, such as coffin bone, &c. In its passage along this tube, moreover, the ovum undergoes changes; and the elaborate and interesting investigations of Dr. Martin Barry have indicated no fewer than twenty-one phases during its transit. In the Ornithorynchus paradoxus, the commencement of the oviduct, the ostium abdominale, is a simple opening. In all other mammiferous animals it presents a peculiar disposition, which has been named the *morsus diaboli*. In the Wombat the morsus diaboli is formed of a multitude of fringes. In the Kangaroo the same appearance is observed; the tube is straight and short in all the Marsupiata, and presents numerous villous processes upon its internal surface. In the Sow and Mare it is much convoluted; but in the feline tribes it is straighter and shorter. The general character of the oviduct is to be wide at its commencement, narrower towards the middle, and wider again near its termination in the uterus.

The *uterus* is composed of a mucous layer, a fibrous coat, an aponeurotic coat, and an investment of peritoneum constituting its serous layer. Its extent is proportioned to the number of young, and the fertility of the animal. When a numerous progeny is produced, the organ is double, and the two uterine ducts have no communication. In the Rabbit there are two uteri, opening into the upper part of a single vagina: this constitutes the *uterus duplex*. In the Guinea-pig, Cavia, Agouti, &c., the two uteri become blended towards their lower part, and terminate in the vagina by a single aperture: this constitutes the *uterus dirisus*. In the Sheep and in the Bear the two organs are more closely blended, forming the *uterus bicornis*. And, lastly, in Man and in the Sloth the organ is single; the *uterus simplex*. The internal surface of the uterus in some species, as the uterus bicornis of the Camel, the Llama, and the Paca, is smooth. In these animals the membranes of the fœtus are unprovided with cotyledons. But in the ordinary ruminants, where the membranes of the fœtus are connected with the mucous membrane of the uterus, by means of numerous placentulæ, the situations of attachment may be perceived upon the surface of the organ itself. When the Giraffe or Cameleopard was first brought to this country, and when its natural affinities were warmly discussed, it was a matter of much interest, in the examination of the first that died, to find longitudinal parallel processes upon the internal surface of the uterus, like those in the Shark, and which were obviously intended for the reception of fœtal cotyledons; and the existence of their placentulæ were afterwards proved, on the occurrence of that remarkable event, the birth of a young Giraffe. In the Hare and Rabbit, the internal surface presents numerous irregular villi. In the cetacea there are regular longitudinal folds, like those observed in the intestine.

The uterus is attached and retained in its position by means of *ligaments*; the inferior or round ligaments, and the superior or broad, which are connected superiorly with the lower border of the diaphragm and with the last rib.

The *vagina* is first seen among mammalia; it is commonly single, but in the embryo is divided into two lateral channels by means of a median septum. In a rare rodent animal, the Piscarbia, a vertical septum extends for an inch into the upper part of the cavity of the vagina, the inferior portion, about two inches in length, being a common canal. This peculiarity is important, as serving to explain the very remarkable form of the vagina of the Marsupiata, which has been considered as an uterus, under the name of uterus anfractuosus. In the smaller Marsupiata, as in the Didelphis dorsigera, a simplification of this remarkable disposition is seen in the great length of the double vagina. In the Dasyurus and Virginian Opossum they are bent upon each other, and resemble the two handles of a vase. The next change that occurs is the production of a cœcal tube, from the upper angle of the bend of each canal, which descends by the side of its fellow to the upper extremity of the common vagina. Daubenton thought that these two cœcal tubuli formed a single canal; Tyson believed them to be separate; and Mr. Owen found them quite distinct from each other, and connected with the upper part of the common vagina only by cellular tissue. In the Kangaroo he ascertained them to be partially blended with each other, but still separated by a septum. But in the Kangaroo Rat the blending is still greater, and the septum is only partial.

That part of the vagina which is below the meatus of the urethra is the urethro-sexual portion. The internal surface of the vagina is either smooth or thrown into longitudinal folds; in Man alone it forms transverse rugæ. In the cetacea there is an appearance of transverse rugæ; but this is illusive; they are merely folds of the internal membrane; the general direction of the rugæ is longitudinal. In the cetacea, in ruminants, in the Hog, and some other animals, there are two small apertures near the outlet of the vagina, opening into two cœcal tubuli, which extend to a variable distance between the coats of the vagina, and sometimes as high as the broad ligaments. They have been described by Malpighi and Gairdner, and are the re-

mains of the ducts of those primordial structures, the Wolffian bodies. Among the higher animals they are, generally, wholly obliterated.

The *hymen* in most mammalia is a vertical septum; in the human being alone it assumes a transverse or semilunar form, and frequently presents itself even here as a vertical bar.

The *clitoris* is an organ of excitement, and presents a very interesting analogy with the male organ. In the early stages of the embryo, there is no distinction between the generative organs of the two sexes. In the female the embryonic condition is maintained through life, while an increased development occurs in the male. In those animals possessed of a bifid penis, there exists in the female a bifid clitoris. In such as have an ossiculum penis, there is also in the female an ossiculum clitoridis, as in the Wolf, the embryonic form being always preserved. In the long and prehensile-tailed quadrumana of South America, the clitoris is of very large size, and grooved along its under part; and in the Lemurs the urethra is continued through the clitoris.

MEMOIR OF THE LIFE OF THE LATE PROFESSOR GRAFE.

By Simeon Bullen, M.R.C.S.L.

To the Editor of The Lancet.

Sir:—I beg to offer for insertion in your Journal the following brief notice of the life and writings of Gräfe. I had the advantage of being personally known to him, and when returning from my campaign in Poland, in 1831, through Berlin, I came under his and Dr. Herzberg's care, dangerously ill with typhus fever; and I retain the most grateful remembrance of the skill and kind attention shown me on that occasion. I take the opportunity of expressing my thanks to Dr. Franz and Dr. Wozniakowski, a friend from Cracow, who were pupils of Gräfe, and intimately acquainted with him, for the information with which they have supplied me in drawing up this memoir.

Amongst the members of the medical profession in Germany, Charles Gräfe occupied a most distinguished place; and his premature death—dying in the strength of manhood—has occasioned a loss to science and humanity that will not soon be repaired. He sprung from a race, alike characterised and conspicuous for science and literature as for heroism and generosity; was born in Poland in March, 1787, and received his preliminary education at Warsaw, where his father held a high official appointment under government. Gräfe went through the course of his studies at this period, and acquired a knowledge of the Latin and Greek classics in a manner which attracted great notice, and gave the promise of future celebrity. Having determined to devote himself to the study of medicine, he visited the principal universities on the Continent, and in 1807 obtained his doctor's degree at the University of Leipsic. His inauguration dissertation, "De Notione et Curâ Angiectaseos Labiorum," displayed his great attainments. The industry with which he must have pursued his studies in every variety had gained him considerable praise and reputation, and he was referred to by Platner, the rector of the university, in his annual reports in the following terms of eulogy:—"Carolus Ferdinandus Graefus Varsoviensis, medicinæ baccalaureus, qui in utroque tentamine (quod cum eo per colloquia, noster ordo nuper habebat) omnium expectationem, quæ haud exigua de eo fuisset et mire superavit." This dissertation was translated into German, and was the means of procuring for him an appointment to a hospital in Halle. He officiated here, in his capacity as surgeon, with so much ability and success, as to obtain the offer of a professorship. Gräfe was afterwards nominated, and accepted the appointment of physician to Alexis, Duke of Anhalt Bernberg. The utility of his labours, and the improvements introduced by him in medical science at this time, were fully appreciated by the medical profession on the Continent. He founded a hospital, and discovered the famous spa of Alexis. He afterwards published yearly reports, containing descriptions of cases treated by mineral waters, as well as an admirable analysis. These reports were extensively circulated in Germany, and were held in high estimation. Gräfe was at this time offered many desirable appointments, and among others the professorship of surgery in Königsberg, which he declined accepting. In 1811 he removed to Berlin, having been elected the Professor of Clinical Surgery in a newly-established university in that city; and the number of pupils which his name and celebrity attracted to the school, proved of the greatest advantage to the interests of the institution. In the year 1813, Gräfe relinquished his professorship to take a part in the continental war. He became appointed, in the first instance, surgeon to a division in the Prussian army; but his talents and humane exertions soon raised him to the highest rank, and he succeeded, notwithstanding the impoverished circumstances of the nation, in alleviating the miseries of war, by effecting the most important improvements in the medical department of the service. He at the same time, under circumstances of peculiar difficulties, wrote works of the greatest practical utility to army surgeons, on Egyptian ophthalmia, military surgery, and typhus fever, diseases which then extensively prevailed among the soldiers. He never omitted any opportunity of being useful. The rules

and directions promulgated by him for observance in military hospitals, as respects the separation and the properly placing of the sick, the application of acids, since so generally introduced into practice, for purification of the air, and the numerous other benefits he conferred on the service, rendered him an object of royal distinction, and brought his name into general esteem. During the temporary cessation of the war he resumed his professorship at Berlin; but, on its renewal, returned to his former position and rank in the military service, and devoted himself with the same unremitting application and success as before. Gräfe, in the year 1814, after the establishment of peace, visited Paris, and met with a reception from many scientific bodies of the most gratifying description. He received, about this time, decorations from William IV. of Prussia, as well as most of the sovereigns of Europe; and Blucher, as well as other famous generals, wrote letters, expressing their approval and esteem towards him for the manner in which he had performed the duties of his appointments during the war.

It will not be a matter of surprise that, with the experience and merited reputation thus obtained, Gräfe's professional career afterwards in Berlin should have been one of unprecedented success in the attainment of practice and wealth. He was frequently consulted by many royal families, and among others by those of the King of Hanover, the Grand Duke Constantine, that tyrannical governor and oppressor of his brave countrymen the Poles, and the Grand Duke Michael. Gräfe was a Knight of the Guelphic Order by George IV., and Commander by the King of Hanover, on whom he operated successfully for cataract. He was, in 1826, proposed by the Senate of Warsaw as a Knight, which title was recognised by the King of Prussia. In the year 1817, Gräfe published most valuable annual clinical reports, which were continued till the period of his death. In 1818 he published a treatise, and proposed improvements on the Taliacotian operation. Few who have read this work, and have witnessed his operations, but will appreciate its value and utility. In the year 1820 he took part in editing the well-known Journal of General and Ophthalmic Surgery. In 1831, Gräfe received great commendations for the active part he took during the prevalence of cholera at Berlin. Gräfe, as well as most of the eminent practitioners in Berlin, formed from their experience most decided opinions that cholera was not contagious, and recommended to government the abolition of the quarantine laws. Many of the pupils of this distinguished man are now occupying the first places in several of the universities, and are a testimony to his noble and scientific exertions. Louis Biermowski, professor of the University of Cracow, has published a collection of some of his operations. Gräfe, as are most of the Poles, was a great linguist. He died in Hanover, where he had proceeded to operate for cataract on George, the Crown Prince of Hanover. He had acquired in practice immense wealth. His loss is universally deplored, and his fame immortal.

36, Manchester-street, Manchester-square,
Nov. 13, 1840.

*** The writer of the above memoir is already favourably known to the profession, as the author of several practical papers which have appeared in the pages of this Journal. Fired with enthusiasm in the cause of Poland, Mr. Bullen was among the first of the young medical men in this country to devote his services to the unfortunate Poles. He was appointed, in the spring of 1831, assistant-surgeon to a cholera hospital, and, successively, surgeon to the military hospital of Ujazdoff, in Warsaw; surgeon to General Rozycki's regiment, and, at the siege of Warsaw, surgeon-general of Krukowiecki's staff. On his return to England, Mr. Bullen was appointed by Lord Auckland and the Government one of the inspectors in the North of England and Scotland during the prevalence of cholera there; and his treatment of that disease was recorded as eminently successful in the various towns in which he was stationed. Mr. Bullen became first acquainted with Gräfe in consequence of being seized with a severe typhus fever, produced by the privations and difficulties which he encountered at Warsaw, and the harassing Prussian quarantine to which he was subjected on his return to Berlin. During his subsequent stay in Berlin, he had frequent opportunities of observing the uprightness of character, the nice discrimination of disease, and dexterity in operation, for which Gräfe was so justly celebrated.

OBSERVATIONS
ON THE
EFFECTS OF DIVIDING THE TENDONS
OF THE VARIOUS
ORBITAL MUSCLES IN ANIMALS.

By E. W. Duffin, *Esq., Surgeon.*

In order to aid me in deciding on the best mode of remedying certain untoward events that occasionally supervene after the performance of Dieffenbach's operation for the cure of strabismus, I undertook a series of experiments on animals for that purpose. The results of these inquiries, though not so

satisfactory as might be desired, still present facts of considerable practical importance, worthy of careful consideration.

In conducting the experiments to be presently detailed, I may state that I was favoured, on different occasions, with the assistance and judgment of Drs. Marshall Hall and Child, and of Messrs. Samwell and Farquhar, surgeons, as well as with the opinions of various non-professional friends, who, being totally ignorant of the nature of the investigation, and consequently unprejudiced in favour of any cherished theory, or anticipated results, were the more likely to take an unbiassed view of the phenomena that they witnessed than we ourselves, who, it may be presumed, could scarcely avoid entertaining preconceived notions.

Before detailing the facts that presented themselves to our notice, it may be premised that great difficulty was experienced in performing the experiments with sufficient accuracy and care to insure the complete division of what was required, and, at the same time, to confine the operations precisely within that limit.

All experiments of the operative kind on the orbital muscles of animals, in order to ascertain their respective functions, must, on several accounts, prove more or less unsatisfactory. The anatomical adaptation of the powers which move the eyeball in brutes, differs materially from that observed in the human species.

In animals there exist certain additional muscles and appendages to the eye, which modify the operations of the simple mechanism possessed by them in common with man. Thus animals are furnished with a muscle denied to man, the *suspensorius*, by which they are enabled to retract the eye in a most remarkable and powerful manner.

The principal object of this muscle seems to be to assist in retaining the eyeball *in situ*, and to obviate any inconvenience, or bad consequences, that might result from the long-continued dependent position of the head, during the time that the animal is feeding, which, in *ruminants*, engages so considerable a portion of the twenty-four hours.

In this class of animals, therefore, we find the suspensorius muscle not only powerful, but very large and funnel-shaped, so as to completely and uninterruptedly embrace the posterior half of the eyeball, and thus most effectually to accomplish this apparently important end. In *carnivorous* animals, whose time is not so much occupied in feeding, and whose heads, therefore, are not so constantly in a depending position, the suspensorius muscle is not so powerful or comprehensive. On the contrary, it is divided into distinct parts, forming, in fact, four independent fleshy slips, which have a common origin, but are inserted into the sclerotis by separate tendons reaching to the greatest transverse diameter of the eyeball, and passing between the attachments of the four principal recti muscles. The oblique muscles also, in ruminating and carnivorous animals, differ from each other in many respects. In the latter class, and in man, the *superior* oblique becomes tendinous immediately before it reaches the pulley affixed to the orbital angle of the frontal bone, and continues its tendinous form, from this point of reflexion, to that of insertion into the sclerotic coat; whereas, in ruminants, the reflected portion of this muscle forms a second fleshy belly of considerable thickness and power, which again becomes tendinous before its final insertion. The part of the eyeball into which this muscle is inserted, does not precisely correspond with the same portion in man; the insertion of the tendon being a little nearer to the cornea in animals. The *inferior* oblique, likewise, in animals, is a much stronger, more fleshy, and abrupt muscle, than it is in man, in whom its insertion is much more extensive, and effected by means of a stronger and more spreading tendon.

When any attempt is made to injure the eye of an animal, the suspensorius, or more properly the *retrahens* muscle, immediately draws the eyeball back into the orbit, and, in doing so, still further protects the organ, by causing the immediate and forcible advance of the membrana nictitans, which unfolds and spreads itself like a curtain over the fore part of the eye.

In experimenting on the internal rectus and oblique muscles in particular, this membrane is a source of great difficulty and embarrassment to the operator, as it not only comes constantly in the way of his instruments, but prevents the observer, after the desired end may have been accomplished, from ascertaining the precise direction in which the pupil is drawn, when the eyeball performs any rapid or involuntary movement, such as may result from slightly irritating the cornea with a feather, or the like.

In all the movements of the eye, indeed, that are not voluntary on the part of the animal, difficulty is experienced in making allowance for the influence of this suspensorius, as any portion of it appears to be capable of being called into play, to the exclusion of the rest of the muscle, especially in animals of the carnivorous tribe, in which, as just explained, it is divided into four distinct auxiliary recti muscles. Thus, if the adductor draw the pupil towards the nasal canthus of the orbit, and the inner portion of the suspensorius or retrahens, co-operate with it, the effect is much heightened by the inner portion of the eyeball being at the same time drawn back towards the origin of this auxiliary muscle; and the same is the case when any of the other three recti are forced into involuntary action. Could a series of experiments be performed on any of the ape tribe, the orbital muscles of which class of animals resemble in every particular those of the

human species, we might possibly arrive at better and more satisfactory conclusions. But even then we should have to contend with another difficulty, that equally opposes our inquiries when experimenting on a class of animals inferior to this, viz., the want of that intelligence which distinguishes reasoning beings.

We cannot, of course, when a muscle is divided in a brute creature, estimate the result in all its bearings, as in man, by requiring the animal to move the eye in such directions as would aid our judgment, and satisfy us that specific results have been attained, and certain objects accomplished. On the contrary, the only conclusions we can arrive at must be deduced from a comparison of the movements of the two eyes, when, by stratagem, we can excite the natural contractions of certain muscles in the organ that has not been the subject of operation. If, on inducing special movements in the sound eye, we find that those of the other organ do not correspond, we may fairly conclude, if they were previously complete, that the power of producing them has been destroyed.

Notwithstanding all these obstacles, however, a few plain and incontrovertible facts do present themselves, which are of sufficient practical utility to merit careful consideration.

The first experiments that I shall relate were instituted with a view to ascertain the results of dividing the several recti muscles. And it may be presumed that they afford a tolerable criterion of the results we might expect to occur, were the corresponding tendons divided in the human species; provided the muscles were in a healthy condition, and the eye not in any way affected with strabismus.

Exp. I.—*Division of the Internal Rectus.*

The tendon of the adductor of the left eye, of a middle-sized, half-bred spaniel dog, was carefully separated from its attachment to the sclerotis. The pupil was instantly directed permanently towards the outer angle of the orbit, and to such an extent that, next day, fully one-third of the cornea was concealed from view. The animal appeared to be wholly incapable of disengaging the pupil from this situation; nor did he acquire the power of doing so in the slightest degree afterwards.

Exp. II.—*Division of the External Rectus of the same Eye.**

In the course of a week from the performance of the above operation, the *external* rectus of the same eye was divided, but without producing any sensible alteration in the position of the eyeball; the pupil still continued to be everted, and partially concealed in the temporal angle of the orbit.

From these facts we may conclude, either that the muscle had not had time to form a reunion with the sclerotic coat, or that the eyeball having been so long unremittingly turned outwards, the reunion was established too far posterior to the original insertion to enable the muscle to invert the pupil again.

Exp. III.—*Division of the External Rectus Muscle alone.*

The abductor of the left eye of another dog, similar in size to the last, being carefully divided, the pupil was permanently turned inwards towards the nasal canthus of the orbit, *but not quite in so great a degree, as in the first experiment it was turned outwards.* Nor did the animal, in this instance, apparently possess any power to dislodge it from its unnatural situation. This we ascertained, in both experiments, by holding its head in a particular position, and then calling the attention of the animal to the opposite direction. On such occasions the intact eye alone obeyed the summons of the will; the other did not move in unison with it.

From the three foregoing experiments, which were afterwards several times repeated, and farther verified in the course of operating on other animals, we may infer—

That, when all the orbital muscles are in a *sound* and *healthy* condition, if we divide either the adductor or abductor, the natural tendency of the antagonist muscle is to contract in the fullest degree of which it is capable; and that, in doing so, it will produce a deformity of the eye similar to that which characterises ordinary internal or external strabismus;* with this difference, that the movements of the eyeball in the direction of the cut muscle will be wholly destroyed. When, however, we divide the adductor in the human eye, for the purpose of remedying strabismus, we very rarely find that the pupil is drawn outwards beyond the visual axis of the orbit. Hence we may conclude that, under such circumstances, the eyeball is either prevented from turning outwards by some retaining adventitious cause, independent of the contracted adductor, which, after its section, no longer offers any opposition, or that the external rectus has been previously partially paralysed, as supposed by Mr. C. Guthrie (vide his report). These facts, moreover, point out the propriety of not only satisfactorily ascertaining that the eye is affected with *confirmed* strabismus previous to operating, but, at the same time, warn us of

* This experiment, though performed a week afterwards, is detailed here, as being connected with the former one.

* If this result be the general law when the orbital muscles are divided while in a healthy condition, then some of the arguments adduced, in a former article, to explain why the pupil does not usually turn outwards after the operation for convergent strabismus, fall to the ground.

the troublesome, if not unfortunate, consequences that may possibly result from immediately dividing the adductor tendon in the second eye, *when not in any way implicated*, as proposed and practised by Mr. Elliot, of Carlisle, should the section of the tendon of the faulty organ not prove *instantly* and *completely* successful.*

Another inference to be deduced from the foregoing fact is, that the oblique muscles take very little part in the lateral movements of the eyes.

When the internal rectus was divided, the obliques did not enable the animal to approximate the pupil at all to the nasal canthus of the orbit; neither did they, on the other hand, contribute the power of everting the pupil, when the external rectus was divided, unless in a very trifling degree; since it will be observed, by reference to the third experiment, that the pupil was not proportionally so much *inverted* when the external rectus was detached, as it was *everted* on the division of the internal muscle. This difference in the degree of displacement of the pupil may have been attributable to the combined action of the two obliques, if their actions be in any way calculated to aid that of the external rectus, as was supposed by Albinus, and is still maintained by Sir Charles Bell, Dr. Marshall Hall, and others. The power, therefore, that many patients possess of turning the pupils slightly inwards after the adductor muscle is divided, we may presume to be dependent much more on the acquired influence of the inner fibres of the superior and inferior recti, than on the action of the oblique muscles. Hence, also, another argument in proof of the doctrine which I have already advanced, that division of either of these latter muscles can never be requisite in the cure of convergent strabismus.

But a practical question of much importance suggests itself for our consideration in reflecting on the foregoing facts, viz., When the pupil is very much everted on dividing the internal rectus—so much so, I mean, that we are satisfied time will not rectify the position the eye has assumed—ought we to wait, before cutting the tendon of the abductor, until reunion shall have taken place between that of its antagonist and the sclerotis, or ought we at once to perform this second operation?

When such an event takes place, i. e. when the pupil is everted in a remarkable degree, I apprehend that the case is one in which the strabismus had been primitively produced by *spasm* of the inner rectus; and that the external muscle, being in a healthy condition, was capable of its fullest degree of contraction. Were we to wait in such case, it is possible that the abductor might form a reunion too far behind its original insertion to be able to restore the pupil to the axis of the orbit, when the abductor tendon should be afterwards separated. If, on the other hand, we do not wait, we have seen that the eye will, in all probability, not be restored to its normal position, while both muscles are equally incapable of action, but that it will retain the position in which it was placed by the first operation. This *permanent* state of eversion, however, is a circumstance that, it would seem, does not occur in the human eye under the circumstances we are considering. However much the external rectus may contract after the adductor has been cut across, in a *strabismal* eye, the patient always possesses the power, when the eye is used *in conjunction with its fellow*, of bringing it to the central point between the inner and outer angle of the orbit, although at such moments the axes of the two eyes do not correspond, and vision is consequently double. If, however, a case were to present itself in which the pupil should be permanently turned outwards after the division of the adductor tendon, and the patient did not possess the power of removing it from this position, it occurs to me that we should gain nothing by waiting until the inner tendon was reunited, and that it would be better to divide the outer muscle at once. It is possible in such case, were the eye liberated, that the superior and inferior muscles might rectify the morbid position of the pupil. A case parallel to that just supposed, it will presently be shown, has actually occurred with regard to the superior rectus in the human eye.

From the foregoing experiments we should naturally expect that similar phenomena would attend the division of the superior and inferior recti; but such is not the case.

Exp. IV.—*Division of the Inferior Rectus.*

In this instance the tendon of the inferior rectus was separated with great care;* the animal lost completely all power of directing the pupil downwards, when that of the other eye was depressed; but it was not drawn upwards, as was expected, by the action of the superior rectus. Three days afterwards, however, it was found to be displaced in this direction, the upper third of the cornea being concealed under the superior palpebra, which situation it continued to occupy.

Exp. V.—*Division of the Superior Rectus.*

The superior rectus of the left eye of a middle-sized dog was separated from its insertion; the position of the pupil was not altered, although it appeared that the animal could not direct the eye upwards.

Exp. VI.—*Division of the Inferior, Internal, and Superior Recti.*

This experiment, as will be immediately shown, was performed for a special purpose.

* Vide Lancet, Oct. 31, 1840.

* These dogs were in general afterwards killed, within an hour or two, and care was always taken to ascertain that the proposed object had been accomplished.

The inferior rectus was first detached, then the adductor, and finally the superior muscle. The pupil at first preserved its natural central position, but in the course of two days afterwards was found to be directed outwards, and very slightly upwards.

My object in performing this experiment was to ascertain whether, when the internal rectus has been divided to remedy strabismus, and the pupil is drawn upwards under the superior palpebra, in consequence of the deformity having arisen from *paralysis* of the *inferior* rectus, any benefit would be derived from dividing the superior muscle. From the result of the experiment, and the experience of two cases of this description which I have met with, it appears to me that the operation would be useful *after the adductor tendon has become reunited to the eyeball.*

Exp. VII.—*Division of all the Straight Muscles.*

In this experiment all the straight muscles were detached; the pupil remained fixed in the visual axis of the orbit. When irritated, the eyeball was retracted, and the membrana nictitans was suddenly spread over the forepart of the eye at the same moment, so that it was quite impossible to decide what influence the oblique muscles exerted, or whether they produced any special movement at all. It was clear, however, that they neither drew the eye towards the outer nor the inner angle of the orbit. Hence I am disposed to imagine, as already stated, that when both of these muscles contract together, they tend to steady the eyeball in the visual axis of the orbit, and contribute to modify the focus of the eye by compressing the sphere. They are, in such case, opponents, though in a slight degree, of the external rectus.

Exp. VIII.—*Division of the Superior Oblique and Internal Rectus Muscles.*

The greatest difficulty was experienced in performing this operation satisfactorily, in consequence of the retraction of the eyeball, and the protrusion of the membrana nictitans. A sharp-pointed bistoury was introduced at a right angle to the tendon, and about midway between the trochlea affixed to the frontal bone, and the insertion of the muscle into the sclerotis. The instrument was pushed sufficiently deep into the orbit, to secure the cutting of the tendon on its being withdrawn with the point in contact with the roof of the orbit. There could, therefore, be no doubt that the tendon was divided. No apparent change occurred in the position of the pupil; nor could we perceive that the movements of the eyeball were in any way modified, or destroyed, by the operation.

The insertion of the internal rectus of the same eye was next separated from the sclerotis, and instantly the eyeball protruded *considerably*, and the pupil, dilated in a most extraordinary manner,* was drawn diagonally outwards and upwards, as if by the equal co-operation of the outer fibres of the superior rectus, and the upper fibres of the external, or abducens, muscle. The eyeball afterwards retained this position, and when the muscles were sympathetically irritated to involuntary contraction, by gently touching the cornea, was always retracted by the action of the retrahens. On such occasions, the upper and outer portion of the sphere appeared to be the part most retracted; the lower and inner portion being, at the same moment, made to advance obliquely, and project in a remarkable manner.

Exp. IX.—*Division of the Internal Rectus and Superior Oblique Muscles.*

In the ninth experiment, the foregoing operations were reversed on another dog: the section of the internal rectus was first performed, then that of the superior oblique muscle. The results were similar to those just related. The eyeball was directed outwards and upwards; its anterior inferior surface was brought into view, and considerable protrusion took place, accompanied with remarkable dilatation of the pupil. When the internal rectus alone was divided in this experiment, as in No. 1, the pupil was turned directly outwards; but, when the superior oblique was cut across, its direction was found to be outwards and upwards. This diagonal direction of the pupil, then, in the two last experiments, although such as might be presumed would be produced by the equal co-operation of the external and superior recti muscles, I am inclined to attribute, in a great measure, to the uncounteracted action of the inferior oblique, since it was exactly what might have been anticipated from the direction of the fibres of this muscle, and did not become *diagonal* until the sec-

* Slight temporary dilatation of the pupil often supervenes in the ordinary operation for strabismus, on dividing the internal rectus, especially in those cases in which the eyeball becomes somewhat more prominent immediately after the operation. But when, in an animal, either of the oblique muscles is cut across, the enlargement of the pupil is very considerable. The iris contracts into a fine circular band, not above half a line or a line in breadth, and the eye presents an appearance very similar to that produced when the animal is poisoned with prussic acid. We should naturally imagine, as the pupil dilates when the eyeball is compressed, and contracts again when the pressure is withdrawn, that liberating the sphere, by cutting a portion of its attachments, would give rise to contraction; but the contrary is the invariable result. It may be presumed, then, that when the eye protrudes, the remaining recti muscles, being stretched, compress the sides of the globe.

tion of the superior oblique had been performed. Be this as it may, the other result, viz., great projection of the lower portion of the eyeball, so that the anterior part of its under surface was brought into view on slightly depressing the lower eyelid, could be attributed to no other cause than the contraction of this muscle when unopposed by the trochlear.

Exp. X. and XI.—*Division of the Inferior Oblique and Internal Rectus Muscle.*

These experiments were conducted in a similar manner to the two last related, and the section of the former muscle, the inferior oblique, was accomplished on the same principle as had been that of the superior oblique; the bistoury being withdrawn with its point in contact with the floor of the orbit. The results which succeeded were very similar to those we had already witnessed. The eyeball protruded as soon as the adductor was cut across, but not before; neither did it project in so great a degree as in the former experiments. The pupil was directed outwards, but not upwards; and in this situation it remained immovably fixed.

Most of the foregoing experiments I have repeated several times, and uniformly with the same results; the degree in which they manifest themselves, however, being various in different animals.

On one occasion, when assisted by Mr. Samwell, on dividing the superior oblique, the pupil was drawn so forcibly towards the outer canthus by the action of the external and superior recti muscles, that, had it not apparently been for the restraining power exerted by the inferior rectus on the lower portion of the eyeball, it would have wholly disappeared.

What, then, are the functions of the superior oblique muscles? So far as may be inferred from the foregoing experiments, very little of a conclusive nature can be deduced.

It certainly appears somewhat paradoxical, and irreconcilable with a first view of the subject, that dividing one of two muscular powers, which both tend, though perhaps in different degrees, to bring the eyeball forwards in the orbit, should be a means of causing it to advance still more, even to protrusion; yet such would appear to be the fact. If we reflect on the course and insertions of these two muscles, we shall perceive that, when they act singly, it is probable they antagonize each other in the *semi-rotatory* movements of the eyeball; and that when they contract at the same time, they will co-operate in drawing the eyeball forwards in the orbit, but *without causing it to revolve in any direction*. On the contrary, they will steady it; and, as the origin of both of these muscles is from the nasal side of the orbit, they will fix the globe of the eye in the visual axis when we look steadfastly at an object placed immediately before us, and at the distance from the eye at which we can see it the most distinctly; i. e. at the true focus of the organ—this being the position in which the exertion of a steadying power is of the most importance, and that which is the most frequently exercised of any. If, moreover, the focus of the eye be ever changed, so as to suit it to the various distances at which we survey objects, these muscles, it appears to me, may be very powerful agents in accomplishing this purpose, by compressing the central portion of the sphere slightly between them, and against the cushion of fat which lines the nasal surface of the orbit; thus not only increasing the distance between the cornea and that portion of the retina on which the image is depicted, but also rendering the cornea itself more convex. The importance of steadying the eye, under particular circumstances, against any inadvertent contraction of the recti, and of accommodating its focus to view objects at various distances, is too obvious to need any comment; and I think we shall, on reflection, be inclined to admit that the same end could not be so efficiently attained by any combination of agency on the part of the recti muscles. When the trochlear muscle contracts, and the inferior oblique is relaxed, it appears to me that the effect will be to slightly rotate the eyeball downwards and inwards; and that when the lower muscle contracts, the upper one being at the same time relaxed, the effect will be to cause the eyeball to slightly revolve inwards, i. e. towards the nasal canthus, and upwards.

But we have seen that there was reason to believe that the inferior oblique aided the external rectus—a view that was taken of its actions by Albinus, and is still maintained by Sir Charles Bell, Dr. Marshall Hall, and others. Certainly, if we consider the direction of its fibres, and the extreme point of their expanded insertion, reaching nearly to the optic nerve, we can scarcely avoid arriving at this conclusion also—viz., that when left free to contract, as it especially is, if the tendon of its antagonist be divided, it will direct the pupil outwards and upwards, and thus assist the external rectus. But not so the superior oblique; at least certainly not in so great a degree. Its insertion, which is by a round tendon, does not usually extend more than two lines beyond the central diameter of the sphere;* neither does it, in so

* In most works on anatomy we are informed that the insertion of the trochlearis does not extend beyond the great diameter of the eye. But this, it would appear, is not correct. I have of late dissected a number of eyes for the purpose of ascertaining this fact, and have, in every instance, found the insertion to be posterior to the greatest diameter of the eyeball. In a preparation now in my possession, the ultimate fibres of the tendon are inserted more than three-eighths of an inch posterior to the central diameter of the sphere.

great a degree, transversely embrace its circumference. To me it appears probable that this muscle, *when both obliques are entire*, can only assist the *internal* rectus, while the inferior one may aid the *external* muscle in certain compound movements of the eye, the nature of which we at present know little or nothing about.

But there is a practical inference to be deduced from the foregoing facts, of considerable importance.

If the eyeball be protruded in the manner we have seen it may be, when either of the oblique muscles is divided in animals furnished with a suspensorius or retracting muscle, how much more might we fear it would be so, were the same operation practised on man, to whom this muscle is denied.

Presuming this extension of the operation for the cure of strabismus to have been attempted with impunity, it appears to me unnecessary to offer any comment on the propriety of farther inquiry before it be repeated.

14, Langham-place, Regent-street,
Nov. 19, 1840.

ON THE PROPER MODE OF

TREATING THE INSANE.

By ARTHUR STILWELL, *Esq., Surgeon.*

To the Editor of THE LANCET.

SIR:—Every one interested in the welfare of the insane, must have watched with anxiety the controversy that has been carried on in your excellent Journal, regarding the possibility and propriety of abolishing all instrumental means of restraint, in the treatment adopted for their restoration to health. Many and able have been the disputants *pro* and *con*.

I feel, Sir, in entering on an inquiry of this kind, that our only desire should be to get at the truth, and that we should not commence our labours with a previous determination to arrive at any particular conclusion. Our only object, the benefit of our afflicted fellow-creatures, in what way their unfortunate situation can be most alleviated, and their recovery, when practicable, the most speedily effected; I am sorry to see angry feelings excited by such a subject. It must be recollected, that experiment must decide the question after all, and not declamation. Our judgment ought not to be too strongly biassed by our disapprobation of the conduct of those who have chained, nay I fear who do chain, their fellow-men to the walls, to their beds, or to their chairs,—conduct at once disgusting to humanity and disgraceful to a Christian country.

Neither in our abhorrence of the atrocities committed under the name of restraint, by unfeeling and ignorant men, should we hastily assert, restraint however mild, is *never* required in the management of the insane, or we shall, I fear, too late repent our rashness. The opponents of the non-restraint system are many and watchful, and every error committed by its supporters will be sent forth to the world with pleasure. The case of Miss A., reported from the Lincoln Asylum, is a case in point; no sensible man can for a moment deny that this patient was grossly mismanaged, or that she would not sooner have recovered from her maniacal attack, had she been properly controlled. That those who now confidently assert that restraint is *never necessary*, will meet with cases, sooner or later, that will induce them to modify their opinions, I feel assured from practical experience. But it does not follow, because it cannot at all times be entirely dispensed with, that people are justified in the unnecessary barbarities, so feelingly related by Sergeant Adams to the Middlesex magistrates, and so justly reprobated by him.

Because I thus express my humble opinion, that restraint cannot always be discreetly abolished in the treatment of the insane, do not let me be supposed as advocating it, in the slightest degree, as a punishment for any intemperate acts a patient may be hurried into, during a paroxysm of excitement. Nothing can possibly be more unjust, than to punish man for the committal of acts, when by the dispensations of Providence, he is deprived of the control of his own actions. On the contrary, whatever degree of excitement the patient may be temporarily labouring under, I believe seclusion, and the kind yet firm conduct of the attendants, will overcome it. How often have I seen in these cases the proverb verified, that "a soft answer turneth away wrath."

Nor do I advocate restraint as a direct remedy for mental disease. Whoever employs it as such, knows little about the matter. For what then do I deem it desirable? Simply to preserve the bodily health of the patient, to confine him occasionally to his bed during the necessary periods for rest, or to prevent his injuring himself and others. I would have it used, as in the delirium of fever, to prevent persons committing acts which in their lucid moments they would regret. I cannot perceive that there is any humanity in allowing a maniac to injure himself, or his bodily health, and thus throw away all chance of recovery, indeed I do not think it acting with justice towards him. To illustrate what I mean, by preserving the bodily health of the patient by restraint, I will suppose the following case to occur. I have seen many such, and so must every other medical man who is engaged in the treatment of insanity. A delicate female is subject to maniacal excitement during the appearance of the

catamenia, she will not remain in bed, but persists, however cold the weather, in standing or jumping about the room the whole night, very probably quite naked; persuasion is perfectly useless, she will not listen to your intreaties or advice. Now I ask, is it not more humane—is it not more rational and scientific treatment, to confine this patient to her bed, and with some suitable anodyne, to obtain for her rest and warmth and comfort at any rate, if not sleep, than to allow her to remain three or four nights together, cold, naked, and exposed?

I will mention one more case now actually under our care. It is that of a gentleman, who has for seven weeks refused all sorts of food; he will not, indeed, touch a drop of water. On his first refusal of food, I attended carefully to the state of his bowels, and tried what hunger would do towards inducing him to take nourishment. I allowed him to fast twenty-four hours, taking care he should have refreshment constantly within his reach, at the expiration of this time he appeared extremely languid and faint. I had then a partridge placed before him, of which I knew he was particularly fond; tea, coffee, &c., were tried; nothing, however, would he take. What is to be done with such a patient under the non-restraint system? Is he to be allowed to die for want of support? Humanity says no. I trust no medical man would hesitate to feed the patient under such circumstances. I have continued to do so, and trust shall be rewarded by his recovery. This case has fully confirmed my previously-formed opinion, of the occasional necessity of restraint.

On the 14th of this month, this same patient would not remain in bed, but continued standing motionless in one particular spot in the room, starved with cold, and I have no doubt from what I know of his disposition, would have remained there till morning. Dr. Marshall Hall, the consulting physician to the establishment, my brother, and myself, for two hours, used every persuasive means in our power, to induce him to remain quiet, but to no purpose; the effect of the shower-bath was tried: at length having exhausted every means our ingenuity could suggest, it was considered desirable to put on the strait-waistcoat, confine him to his bed, and to restore and maintain warmth of his limbs and person. What was the result? in two hours he became perfectly tranquil, the waistcoat was removed, and our patient passed a quiet night.

The strait-waistcoat is certainly the best method of applying restraint, that has fallen under my observation; it places the arms in such a position as to relax the muscles, and I know from having tried it on myself, occasions scarcely any inconvenience. Handcuffs, coercive chairs as they are called, chains and irons, are perfectly unnecessary, and most inhuman; it ought at once to be rendered illegal to use them.

Such cases as I have now related are of comparatively rare occurrence, and I believe in a well-conducted asylum coercion is seldom required, but that it may be occasionally, if the patients' welfare,—not the caprice of individuals,—is to be made the first consideration, I think I have clearly demonstrated. When necessary, the means employed should always be used by, or in the presence of, the superintendent, and not be left to attendants; the necessity of it, and the cause for which it is used, should also be explained to the patient.

Your able correspondent, Philanthropos, has placed the question in its proper light, by admitting the mild and, I am positive, the sometimes necessary restraint of the strait-waistcoat, as a part of the *humane* system. That this system, so understood, may become the only one in use in this kingdom, all who feel for those whom the Almighty has seen fit so heavily to afflict must desire. Although I disapprove of the system of non-restraint carried to such an extent as at Hanwell, yet I am glad the magistrates have decided on giving it a fair trial; it will then be seen to what extent it can be adopted, consistent with the personal security, bodily health, and ultimate recovery of the patients.

It is there in able hands, and even those who differ from them can but admire the laudable exertions of Dr. Conolly and his able supporter, Miss Powell, the matron.

I must beg pardon for having trespassed to such an extent on your valuable columns, but the surpassing interest and importance of the subject must be my excuse.

Moorcroft House Asylum,
Hillingdon, near Uxbridge.

FOREIGN BODIES IN THE LARYNX OR TRACHEA.

What is to be first done?

To the Editor of THE LANCET.

SIR:—In the forthcoming volume of the "Medico-Chirurgical Transactions" are two valuable papers on this subject, by Mr. Cæsar Hawkins and Mr. B. Travers, jun. Both these gentlemen recommend the early recourse to tracheotomy.

Before, however, proceeding to this operation, I would strongly advise the trial of the method which I have described as having been successful in the case of choking. Let the patient be properly placed in the prone position; let the abdomen be compressed; then let one hand be placed upon

the back, and forcible pressure, or a forcible blow, be made with the other upon the thorax. Let this be done immediately after inspiration, after a full inspiration, if the patient can be induced to make one, and be repeated for a certain number of times. Let the position of the patient be changed, and let the blow be again repeated.

If this mode of proceeding should be unsuccessful, I would give an emetic. Vomiting, though *attended* by closure of the larynx, is *followed* by an unusually *open* state of that organ, and by an unusually free and full *expiration*. During this effort the foreign body might happily be expelled. After this the percussion may be repeated.

Should these plans fail, I believe tracheotomy is our only resource.

I must be allowed, before I conclude this brief note, to caution the reader against confiding in the *paroxysmal* form of the affection for his *diagnosis* of a foreign body in the trachea. I have just attended a boy of fourteen, with acute tracheitis, without the suspicion of a foreign body, which yielded to ample blood-letting, and mercury and antimony in ample doses, in which the disease presented the most decided remissions and the most frightful paroxysms. I am, your obedient servant,

PHILALETHES.

Nov. 10, 1840.

TINCTURE OF THE MURIATE OF IRON IN *Discharges of Blood from the Urethra, Leucorrhœa and Dysmenorrhœa.*

BY CHARLES CLAY, ESQ.,

Surgeon, Piccadilly, Manchester, Lecturer on Medical Jurisprudence.

IN addition to the remarks I have made on the use of the tinct. fer. mur. in diabetes mellitus, inserted in your Journal of Oct. 10th, I have now to communicate its effects on a disease of a more frequent occurrence in general practice, and in many cases no less difficult to ascertain in its cause than to manage in its cure; I allude to excessive discharges of blood by the urethra. I am the more induced to make these observations at this time, from the excellent remarks reported in your Journal of Oct. 17th, the result of a meeting of the Medical Society on this subject. I have had frequent opportunities of seeing serious cases of this nature, and have often been puzzled to ascertain if the discharge arose from the kidneys or the bladder; the uncertainty of which has presented no little difficulty as to the means of cure. The mere mechanical removal of the coagula from the bladder seemed to offer but a very temporary relief, and subjected the patient to a tedious treatment, under which he could seldom hope for permanent recovery, and was much more likely, finally, to sink from exhaustion. The case introduced by Mr. Pilcher to the society was very interesting and instructive itself, but led to far more valuable remarks on cases of more general occurrence. Mr. Harrison's plan of injecting the bladder with warm water is the mere mechanical removal of the effect of the disease, and, in my opinion, does nothing towards removing the disease itself, viz., in checking the source from whence the discharge arises. If the hæmorrhage arose from the inner surface of the bladder, the injection of warm water would rather increase it than otherwise; and, if it arose from the kidneys, which, in nine cases out of ten, I am disposed to think it does, the injection of a solution of salts into the bladder, as proposed by Mr. Dendy, could have no possible effect on the seat of disease, but merely facilitate the removal of the coagula at the risk of adding more serious irritation to the inner surface of the bladder by the presence of stimulating applications, which must be sufficiently extensive by the foreign body formed by the coagula. In all cases where great discharges of blood have taken place by the urethra, it is generally remarked that the quantity of urine is small; and this is a strong presumptive proof that the disease is seated in the secreting organs, and not in the bladder: under such circumstances we can hope for no advantage by local applications to the inner surface of the bladder; it must be evident, our only advantage is by constitutional treatment, assisted by local applications over the region of the kidneys. I have just discharged a case cured, illustrative of this subject. Mr. Wood, aged 60, of Oldham-road, Manchester, sent for me in great haste; I found him unable to pass any urine, only a teaspoonful, or, at most, two, of blood, came away at every attempt; the bladder was distended, and the abdominal surface very tender. I passed the catheter; about six ounces of blood came way, considerable relief was given; the blood discharged was nearly pure, and destitute of urinal smell. As the quantity of blood discharged was but trifling, I proposed passing the catheter again next morning; in the mean time I ordered a warm fomentation to the abdomen, and gave the following:—

Tincture of muriate of iron, ℥j;
Tincture of opium, ℥iss;
Infusion of Iceland moss; infusion of gentian, of each ℥iv. Let an ounce be taken every four hours.

On my visit next morning, I learned that little rest had been obtained, the desire to void had been frequent, but the character of the blood was much changed, very dark in colour, and watery; and the quantity through the night about twenty-six ounces. Finding no further use for the catheter, I ordered the mixture to be used as before. On the third

day, all desire, except about twice in twenty-four hours had left him. The discharge was now high-coloured urine, but not the slightest trace of blood. After continuing the use of the tinct. fer. mur. for about ten days, he gave it up, being quite free from any unpleasant symptom. This case was remarkable, as being one that had existed for some years, and all hope of permanent relief was lost; it only forms one of many that I have relieved, or entirely cured, by the same means; occasionally I have obtained relief from blisters and tartar emetic plaster over the region of the kidneys; but except in recent cases, and of no great extent, I have not found them of permanent benefit; on the contrary, few cases have withstood the tinct. fer. mur. The number of cases I have seen relieved and cured by it warrants the conclusion that the disease is generally in the kidneys, and must therefore be attacked through the constitution. I cannot resist the opportunity of stating, that the effect of this preparation of iron is equally encouraging in leucorrhœa. In the manufacturing districts a vast majority of females are subject to this affection, and the number applying for relief at the dispensary for this affection only is incredible. A wash of sulphate of zinc, and a similar mixture as above given in Wood's case, is found to be very effective in spite of the best remedy: however, their standing employment, in an overheated atmosphere, soon tends to a return of the disease. I have succeeded, also, in restoring the menstrual discharge by its exhibition; and as cases of leucorrhœa are frequently the effects of dysmenorrhœa, the checking of the former has not unfrequently restored the latter.

ON THE APPLICATION OF

STRAPPING AND PRESSURE IN ORCHITIS.

By J. Dixon, *Esq., Surgeon.*

The difficulty experienced too frequently in remedying those chronic enlargements of the epididymis which remain after acute inflammation of the testicle, whether the consequence of gonorrhœa or injuries of that organ, will, I have no doubt, be obvious to many in the profession, as affording a considerable degree of annoyance to the patient, as well as some slight discredit to the practitioner. From the depending position of this organ, the high degree of vascularity which it possesses, as well as the readiness with which it throws out lymph into the surrounding tissues, or connecting medium of the convolutions of the vas deferens, all seem to conduce to the difficulty of the absorbents, to remove the deposited lymph which they would naturally do in a comparatively short period in other parts of the body, after the more acute symptoms have been subdued by appropriate treatment. The mechanical support afforded by the suspensory bandage acts only as a palliative and prophylactic agent, without conducing to afford a permanent cure. Should this, however, be assisted by the application of adhesive plaster in the form of straps, surrounding with a steady, but equable, pressure the testicle, as well as the enlarged epididymis, the cure becomes a permanent one, by the constant pressure not only supporting the parts, but preventing the varicose condition of the veins, which is frequently a result, and establishing a certain degree of progressive absorption, and the removal of the morbid deposit, by which the testicle itself is not unfrequently atrophied.

The application of this treatment, even in the more acute stages of the disease, where the secrecy of the patient demanded it, I have adopted in numerous cases with the most satisfactory results; the patient being allowed even, in some cases, to follow his occupation, without in the slightest degree inconveniencing him. These cases, however, I must state, were treated at the very commencement of the disease. The method I have adopted is the following: placing the patient upon his back, and seizing the testicle with the left hand, and applying slight pressure, so as to empty the veins of the part as much as may be practicable; then applying with a graduated pressure a narrow piece of adhesive plaster from the commencement of the cord at the upper part of the scrotum, and encircling the whole of the testicle, without putting the patient to any severe pain; it will require, in the course of twelve or twenty-four hours, to be again repeated; owing to the diminution of the swelling, the effect of the pressure is consequently diminished. This plan was first, I believe, brought before the profession by Mr. Cross, who adopted it chiefly in the acute stage of the disease, at the same time enjoining the recumbent position: however, I have but little doubt that the patient may safely, in many cases, be allowed to follow his usual employment, unless of a very laborious nature. The usual purgatives and other anti-inflammatory medicaments ought not to be neglected; at the same time, some slight objections have been offered to this plan of treatment in the more severe form of orchitis, owing to the severe pain often experienced by the patient. I can state that the pain, however, is not by any means severe or continued, if the pressure be judiciously employed, and therefore ought to offer no insurmountable barrier to the adaptation of a remedy at once simple, scientific, and highly beneficial.

Coleford, Gloucestershire,
Nov. 12, 1840.

British Insects and their Transformations—Butterflies. Arranged and Illustrated, in a Series of Plates, by H. N. Humphreys, *Esq.; with Characters and Descriptions by* J. O. Westwood, Esq., F.G.S., Sec. of the Entomological Society, &c. Nos. 1—4. Smith: 1840.

This is a very beautiful contribution to natural history; and will prove an acquisition to medical men in the country, who take an interest in its pursuit. The plates, exquisitely drawn by Mr. Humphreys, represent the insect in its three great stages—as the caterpillar, the chrysalis, and the butterfly or moth—all hanging side by side on the plants which furnish their ordinary food. The transformation thus seems to take place under the eye; and the metamorphoses are associated in the mind, without any effort. The butterflies and moths are to be completed in sixteen parts, each part containing three plates, on one of which we have counted eighteen figures. The work will not be confined to the Lepidoptera, but will be extended "to all other British insects, many of whose transformations are, perhaps, even more wonderful than those of butterflies."

Mr. Humphreys, in his preface, compares a person in the fields, unacquainted with natural history, to one placed in a library and unable to read. "He cannot read in the beautiful book of nature, when in the summer it opens its brightest leaves."

Entomology is a branch of knowledge more easily acquired than many imagine.

"The individual beauty of the insects in every stage, the ease with which they are preserved, and the comparative facility with which a complete collection of British species may be formed, particularly of butterflies, of which we number scarcely more than eighty distinct species, render it a task of easy attainment; and carrying forth the student among trees and flowers at the most delightful period of the year, its pursuit becomes very captivating; a most attractive first step towards the acquirement of a general knowledge of natural history."

Mr. Humphreys throws out a suggestion, which has, perhaps, a touch of the butterfly Utopia in it, but which is ingenious, and deserves trial.

"It appears by no means improbable that we may naturalise some of the splendid tropical insects. Their system of hybernation in the pupa case, in which state insects have been found to resist almost any degree of cold without injury, would shield them from the effects of our long winters. Their development would not take place until the warmth of summer became sufficient, when we might see butterflies flit from flower to flower."

Mr. Westwood's descriptions are somewhat "crabbed and harsh," and written in an entomological English, which has small pretensions to elegance or accuracy. They are, no doubt, technically correct, for their author stands deservedly high as an entomologist. Still Mr. Westwood may spare us his discussions about "generic names," and reserve the squabbles of entomology for elementary treatises, or special papers. To the general reader, the "gentile without the gate," the distinctive character—the physiology—the habits and the life of the insect possess most interest.

Every insect has a "story" in his "life:" the changes through which he passes are remarkable—his friendships, loves, wars, have been sketched, but they have never yet been satisfactorily handled. Naturalists have been slow to imitate the industry, and have rarely risen to the connected observation—the philosophy of Reaumur. Mr. Humphreys has a graceful pen, and may add much to this department of the work, while the secretary's descriptions may be curtailed.

Mr. H. supports the doctrine, that as insects have no well-defined brain, they want "concentrated feeling," by the following fact:—"Mr. Haworth struck down a dragon-fly, and in so doing accidentally severed its long abdomen from the rest of its body. The mutilated insect, after this misfortune, felt so little inconvenience or loss of appetite, that it greedily devoured two small flies. Mr. H. then contrived to form a false abdomen to create such a balance to the rests of the body as would enable it to fly; after which it devoured another insect, and on being set at liberty, flew away with the greatest glee, as if it had received no injury."

Who does not take an interest in, and feel a sort of respect for, this indomitable dragon-fly—this hero, Attila, Napoleon—the very genius of war? If Mr. Haworth did not deal unfairly with him, in the affair of the abdomen, he may in time have stood, like Alexander, with tears in his eyes,—because there was not another fly to devour.

We do not know whether it was in compliment to the medical profession, but the first

plate represents the *Papilio Machaon*, and the *Papilio Podalirius;* named by Linnæus from the two sons of Æsculapius:—*Hujus deinde duo filii, Podalirius et Machaon, bello Trojano ducem Agamemnonem secuti, non mediocrem opem commilitionibus suis attulerent.* The *Machaon* is a gorgeous fellow; and reminds us of Sir Astley Cooper. It appears that we have no Podalirius in England; his existence here is at least disputed.

Demonstrations of Anatomy, being a Guide to the Dissection of the Human Body. By George Viner Ellis, one of the Demonstrators of Anatomy in University College. London: Taylor and Walton. 1840. pp. 620.

How should anatomy be studied, in order to secure the attainment of the most accurate acquaintance with it? This is a question about which men of experience will differ but very little; it is one of the utmost importance to those now engaged in their studies in the schools of medicine, and the answer to which it behoves them well to consider. To the student—for to him the work whose title heads these remarks is addressed—we would say, that lectures, libraries, anatomical preparations, and museums, have their uses; they are very important aids to knowledge; but that to his own labour in the dissecting room, he must not, indeed, exclusively, but mainly, look for an adequate acquaintance with anatomy. The use of a book in the dissecting-room obviously is not that the student should *learn* it; but, by the *assistance* of it, he may acquire a thorough knowledge of the natural structure of the human body.

Now, the books in ordinary use contain more or less complete descriptions of the different structures of the body; and when the part is found and already dissected out, they afford all the necessary information, but they are defective as guides for the different steps of the inquirer's progress; they do not *sufficiently* inform him of the best *manner* of proceeding, and of the objects met with as he proceeds. "Anatomy," says Mr. Ellis, "may be studied in two different methods, the one demonstrative, and the other descriptive:—the former treats of the parts only as they are exposed in dissection, and of their relative position; the latter gives minute details of objects unseen, describing the different structures without reference to the order in which they appear, and has been very generally employed in the numerous works of instruction in practical anatomy; but every one acquainted with the difficulties to be overcome by the young dissector will readily admit that this method is insufficient as a guide to his progress.

"To supply this deficiency the present work, designed and completed from the subject, and confirmed by experience, is humbly submitted to the student, in the hope that his labours will be diminished, and the advantages to be gained in the pursuit of practical knowledge increased. In the execution of the plan, the great divisions of the body which are generally established, viz. head and neck, thorax, back, extremities, and abdomen, have been placed in different sections, and the dissection of each has been conducted by the employment of successive stages, determined either by certain apparently natural limits, or by those most convenient in practice;—by means of full directions for the performance of the different steps;—by describing at one time only so much of a part as is visible;—and by noting each as it appears."

The work of Mr. Ellis is really what it professes to be, "A Guide to the Dissection of the Human Body." In the study of each section of the dead subject, it begins by mentioning how it may be most conveniently placed; how incisions are to be made; in short, in addition to containing clear and correct descriptions of each organ and part, it sets forth what is to be done, and mentions each object that will be met with in succession. Moreover, the instructions are blended with the descriptions, so as to be found where the student engaged in dissection would desire to find them.

It will be inferred that the author does not seek to substitute anything for dissection; he presupposes dissection, and his efforts are directed to *guide* the learner's progress in it. He has availed himself fully of the large opportunities placed within his reach, and has ably and honestly accomplished his object. Such being the facts, it is almost needless to observe, that his unpresuming and highly-useful work is strongly recommended by us to the real student of anatomy.

THE LANCET.

London, Saturday, December 5, 1840.

THE treatment of insanity having to do as it has with the diseases of the mind, the diseases peculiar to our race, and the most distressing not only to the patient, but to all connected with him, is interesting in itself; and the improvements in its methods derive an additional importance from their connection with the treatment of the irregularities in the propensities, sentiments, and perceptions observed in criminals; or the lesser aberrations from reason and rectitude, in the mass of mankind. Madness, crime, sin, were at one time all treated summarily; death, chains, stripes, weeping, wailing, gnashing of teeth, anguish and eternal agonies, were the sovereign remedies; the king, the priest, the legislator, and the physician, believed in them, and rarely thought of rectifying what was wrong, by any but violent means, or by the destruction of the wrong-doer. A few eccentric persons who believed in kindness and in reason, applied their convictions practically to the treatment of the insane; and on comparing the results of the systems of treatment, it was discovered that the humane treatment was the most efficient, the best for the unhappy patients, and the best for society.

The world is indebted to PINEL in France, and to the Society of Friends in England, for the earliest advocacy of the humane treatment of the insane. If lunatics have till lately been treated with inhumanity in England, it must not be ascribed to any defect in the national character, but to the bad examples of Bethlem, St. Luke's, and other large institutions, where Parliamentary Committees have proved that the managers have been equally ignorant, cruel, and careless; or have contrived to conceal their proceedings from the public, to indulge in the grossest jobs, and, in some instances, to appropriate the funds of the institutions to their private advantage. It is a remarkable circumstance, that the medical officers of Bethlem and St. Luke's have never contributed a single fact of importance to the science of insanity; and that they have not only never originated a single improvement in the treatment, but have been the last to adopt the discoveries made in other quarters. The cause of this may, perhaps, be accidental; the governors may have been unfortunate in their choice of officers, or it may be the result of a deep design, and they may have anticipated HAHNEMANN in the application of *similia similibus curantur*, by treating imbecility homœopathically. It is a sad reflection that all the opportunities for observation offered in these large, wealthy institutions should never have been seized, and that the patients should be the last to experience the advantages of the humane system of treatment.

If Bethlem, St. Luke, and several other large asylums, have remained stationary, or have retrograded, the Quakers' Asylum, some private establishments, the Scotch asylums, the Lincoln Asylum, and, latterly, Hanwell, have persevered, and have carried out the rational system to an extent which had not before been deemed possible. Mr. HILL and Dr. CHARLESWORTH first declared themselves the advocates of the "*non-restraint* system," which appears destined to form an epoch in the treatment of the disease.

The term "non-restraint," we may remark, is not literally correct; for, when the system is most rigidly carried out, the patient is *confined* to the asylum, and in many cases to his room. But this confinement is not felt like fetters; it is less degrading, irritating, and exasperating, than ligatures on the limbs. The restraint is little more severe than the voluntary confinement of servants to the house, or of workmen to their daily task. The violent, raving maniac has, however, necessarily to submit also to further restraint; the keeper's arms are called into action, and have to supply the place of the strait-waistcoat, straps, and chains. The only question that admits of

controversy is, whether, when coercion of some kind is required, and applied by all parties, bands, instrumental restraint and mechanical advantages should be altogether discarded, and replaced by the force of the keeper's hands and arms? Under which treatment does the patient suffer least, and has he the best chance of speedy recovery, the exclusive "keeper-restraint" system or the mixed treatment, in which instrumental restraint is partially employed? And if it should turn out that the advantages are pretty equally balanced, or that they preponderate in favour of occasional mechanical restraint, are not the liabilities to the excessive application of instruments adequate reasons for foregoing the use of an agent that may be dispensed with, and is so likely to be abused by the keepers, at least in large asylums?

Dr. CONOLLY, the resident physician at Hanwell, states, in his last report, that "during the past year *not one instance* has "occurred, in which the resident physician "has thought it advisable to resort to any "of the forms of *bodily coercion* formerly "employed. The use of the strait-waist-"coat, the muff, the restraint chair, and of "every kind of strap and chain designed to "restrain muscular motion, was discontinued on the 21st of September, 1839, and "has never been resumed. * * * The "management of the patients without bodily "restraint has been applied to 1008 lunatics, "and has been acted upon for more than "twelve months; *and it has thus far been "found practicable to control every variety of "case, without any fatal accident, or serious "outrage having occurred.*"

This is, in itself, an admirable result; and though it should be ultimately found advisable to adopt the resources of a mitigated restraint, will impress indelibly on the records of science the important truth that personal coercion *may be* dispensed with in almost every case of insanity.

The numerous facts in the last LANCET, with the statements of Mr. TULK and Mr. Sergeant ADAMS, respecting the cruel punishment of a lunatic in Bethlem, will require further discussion.

JUST as this Number of our Journal was going to press, we had an opportunity of reading the report of Dr. KAY, the Assistant Poor-law Commissioner, on the proceedings which he had instituted, under the authority of the Poor-law Commissioners themselves, relative to the death of ELIZABETH FRIRY in the Kensington Union. We have only time at present to say, that we shall refer to that part of the report which relates to the inquiry before the coroner in the next LANCET. In the mean time, we would recommend to Dr. KAY to make himself acquainted with the provisions of the 67th WILL. IV., touching the summoning of medical witnesses at inquests; and, also, with the common-law right of practising surgery, which may be exercised by any person in this country. Further, when Dr. KAY thinks proper to complain because the medical witness at the inquest was not a member of the College of Surgeons, we deem it right to ask him whether there are not hundreds of gentlemen holding the office of SURGEON in the unions, under the *direct sanction of the Poor-law Commissioners*, not one of whom is a member of the disreputable and worthless college which he has named? Dr. KAY, in this affair, has not acted with his usual foresight and sagacity. He has committed several sad mistakes in connection with a very deplorable catastrophe.

COLLEGE OF SURGEONS.

MR. LISTON has been elected to fill the vacancy in the Council of the College of Surgeons, made by the death of Sir Anthony Carlisle; and Mr. Lawrence occupies Sir Anthony's place in the Board of Examiners. The members of the council passed over in the selection to the latter office, are Mr. Howship, Mr. Copland, and Mr. Briggs; an arrangement in which the members of the profession cannot but concur.

MEDICAL SOCIETY OF LONDON.

Monday, November 23, 1840.

Mr. KINGDON, President.

INFLUENCE OF MENTAL ANXIETY ON DISEASE.

THE discussion on Mr. Dendy's paper was resumed.

Mr. HEADLAND agreed with the paper, in the opinion that medical men generally were not sufficiently alive to the importance of the early symptoms of brain disease. Many diseases, supposed to be the result of physical causes, had their origin in mental exertion, and in over-anxiety. In the present state of society, in which there was such a spirit of emulation in all professions and pursuits, the minds of individuals were kept too much upon the stretch to be compatible with their bodily health. If this opinion were correct, he thought we could explain the reason why diseases, during the last few years, had almost entirely changed their character. He knew that the difference in the character of fevers had been attributed to atmospheric and other physical causes; but he thought it more rational to consider that this difference depended rather upon mental excitement. In a few years nosology must be entirely modified, to meet the changes dependent upon the progress of civilisation. With reference to the insidiousness with which disease of the brain occasionally went on, he related the case of a young lady who was attended by the late Dr. Armstrong, Mr. Kingdon, and himself. The patient was about twenty-four years of age, and had what was considered to be common fever, with a more than usual pain in the head. There was, however, no delirium. Treatment was of no avail; and at the expiration of seven or eight days she sunk, having retained her faculties perfect until within two or three hours of her death. After death the membranes were found more than usually vascular, and lymph was thrown out between the arachnoid and pia mater; both hemispheres of the brain, down to the centrum ovale, were involved in one immense abscess; the ventricles were healthy. An abscess had destroyed one-half of the cerebellum.

Mr. KINGDON agreed with the last speaker, on the influence which anxiety and great mental exertion had over the character of disease. He felt convinced, in reference to the question of the insidiousness of brain disease, that many cases of contracted hands, supposed to be from rheumatism, had, in fact, their origin in the brain. He related a case of the kind in which six ounces of water existed in the ventricles, which were lined with a membrane resembling velvet, with a short pile.

Mr. PROCTER thought it necessary that we should direct more attention to the brain than we were generally in the habit of doing. We frequently overlooked the cause of dyspepsia and other diseases, when they had their origin from over-anxiety in mercantile and other pursuits; we were apt to attribute the origin of symptoms to the stomach, when, in fact, they were primarily dependent upon the brain. How were we to treat patients who had overworked themselves in this manner? He believed that, when the pulse was quick and irritable, as was usually the case in these patients, and there was febrile excitement, good living was desirable; this, with the removal of the cause for a time, by a journey into the country, and the avoidance of mental excitement, and the obtainment of good rest, was the best plan to be pursued.

Mr. DENDY thought the case related by Mr. Headland an extreme one. He had seen, however, many cases in which minor diseases had so masked the head affection, that the attention of the practitioner had been entirely drawn from it, and the patient had sunk; he had known this to occur in slight mesenteric disease, and in intus-susception. The sympathy between affections of the head and remote parts of the body was more common than was generally supposed. Agitation of mind produced severe disorders and diseases. He had a patient under his care in the general enjoyment of good health, who invariably vomited up his breakfast, when he received unfavourable intelligence by the post; this was unattended with any despondency. During the "Reign of Terror" in France, heart-diseases were very prevalent from over-mental excitement: many sudden deaths occurred, which were attributed to apoplexy, but which were probably dependant upon hypertrophied heart produced by the action of the brain on the circulation. Books were written on dyspepsia and liver disease, the authors of which had not stopped to inquire what influence the brain had in the production of the disease; and thus the effect of the brain affection was often mistaken for the cause. How far we could remedy this state of things was another question. We might prescribe for the over-anxious and brain-worked, the proper remedy — rest, as we advised the gouty patient to refrain from punch. We were not responsible if that advice were disregarded.

Mr. KINGDON said, it was but justice to Dr. Farre to state, that he had long entertained the opinions which Mr. Dendy had expressed, in regard to the influence of brain affection on the digestive and other functions, and always impressed upon his patients the necessity for quiet.

Mr. CRISP related a case in which dimness of vision, amounting almost to loss of sight, arose from over-attention to business. Under

the employment of antiphlogistic remedies the patient recovered.

After the usual business of the meeting had terminated, the following resolution was put and unanimously carried:—

That this society have learned, with deep regret, the decease of their late highly-respected friend, T. E. Bryant, Esq., whose professional talents and courteous deportment, and whose valuable services, not only as an ordinary fellow, but, also, as president of the society, rendered him one of their most valued and esteemed members; and that while expressing their sense of the loss the society have sustained, they desire to offer their most sincere condolence to the widow and family of the deceased, and to assure them of unfeigned sympathy with them in their severe bereavement.

Monday, November 30.

Dr. CLUTTERBUCK, President.

EFFECTS OF EXERTION ON THE PHYSICAL FRAME. SCIATICA.

Some conversation took place with reference to the influence of great mental exertion on health and longevity. Exercise of the brain, however great, was not considered to be prejudicial, when unaccompanied by depression of spirits, or anxiety; it was mental excitement, accompanied by the struggles for ascendancy in the various professions and trades, every man's intellect being on the stretch for the purpose of excelling his neighbour, or for the mere gaining of a livelihood, that was considered to injure the physical structure, and shorten the duration of life. As an instance of the great extent to which the mind might be exerted, when free from anxiety, without any injury, but rather with benefit, to the bodily strength, the profession of the law was mentioned. Lawyers, it was well known, underwent very great mental exertion, yet were generally robust and long-lived men.

Dr. CLUTTERBUCK had lately suffered from sciatica, and the treatment of his case had offered a good illustration of the unsettled state of opinion with reference to the remedies to be employed in this disease. He had been recommended a dozen "infallible curatives," but they all had failed. Among these were the belladonna embrocation, the tincture of aconite, mustard poultice, Dover's powder, and purgatives. He lost twelve ounces of blood on the second day. At the end of a week he took a drachm of vinegar of colchicum, with twenty drops of laudanum, at bed-time; he was very much relieved, but had reason to believe, from the quickness with which the remedy operated, that the relief was mainly owing to the tincture of opium. This he proved to be the case afterwards by experiment. Time, also, he thought, might have had some share in the case.

Mr. HEADLAND had found sciatica to be relieved by the administration of six drachms of oil of turpentine, with a like quantity of castor oil. This remedy was generally most effectual in women, and in those cases in which a distended condition of the bowels pressed on the origin of the nerve.

Dr. BENNETT had cured sciatica by frictions with horse-hair gloves.

Mr. ROBARTS used turpentine internally and externally with benefit in sciatica. Internally he administered it in half-drachm doses, mixed with magnesia and peppermint water, every four hours, and applied it in a hot state externally to the affected part.

Mr. HARRISON believed that the reason why so many remedies were recommended and failed of success in sciatica, consisted in the fact of the disease having three stages, the distinction between which were not drawn properly. In the first stage, that of inflammation, colchicum and antiphlogistic treatment were of service; in the chronic stage, the external application of stimulants or sedatives, and the internal use of turpentine, were of good effect; and in the third stage, happily of rare occurrence, when the limb became wasted and powerless, throwing a stream of hot air in the course of the nerve, in the way he had recommended at a late meeting of the society, he had found to be the most effectual plan of affording relief.

Mr. HUTCHINSON usually commenced with the application of leeches, followed by that of a blister, which was afterwards dressed by a liniment containing colchicum and muriate of morphia.

Mr. WARD had little faith in internal remedies in sciatica. Cupping and acupuncture in the course of the nerve he had found to give the greatest relief.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 24, 1840.

Sir B. BRODIE, President.

Case of Osseous Union of a Fracture of the Neck of the Thigh-bone within the Capsule. By WALTER JONES, Esq., of Stafford. Communicated by E. STANLEY, Esq., F.R.S.

THE patient in this case, who was more than eighty years of age, was first seen by Mr. Cole, the house-surgeon of the Stafford Infirmary, on the day succeeding that in which the neck of the thigh-bone had been fractured by a fall. Mr. Cole applied a splint to the outside of the limb, extending from the pelvis to the foot, and bound the legs together, the apparatus being completed by a bandage round the pelvis. The patient suffered so much pain, aggravated by a troublesome cough, that he removed the

splint and bandages. After having allayed the pain and quieted the cough, however, by the aid of laudanum, Mr. Cole reapplied the bandages, and retained them in their position six or eight weeks, when the patient was allowed to get up. During the following spring and summer, he was able to go about with the assistance of a stick; but becoming the subject of chronic catarrh, he died about a year and a half after the injury had been sustained. The capsule was found much thickened; and it became necessary to divide the shaft of the bone before the knife could be passed round the joint; so near had the trochanter approached to the acetabulum. The direction of the fracture could not be traced, or the bond of union made out, until the bone had been macerated. As the portions of capsule became loose, they were removed with the forceps, "which enabled me," says the author, "to discover, what I believe to be the case, that the fracture was within the capsule." The bone sawn through, and a very accurate drawing of one of its sections, were shown to the meeting.

Mr. STANLEY thought that the case which had just been read was of sufficient interest to bring before the society on three grounds—1st, that it was a well-marked case of osseous union of fracture within the capsule of the neck of the thigh-bone; 2d, from the fact of the advanced age of the patient; and 3d, that there was no particular apparatus applied to keep the fractured extremities of the bone in apposition.

Mr. BRANSBY COOPER looked at the preparation which was contained in a bottle, and expressed his conviction that the union existing between the divided portion of bone was not osseous. But granting in this case that the union was by bone, such a circumstance would militate nothing against the often-expressed opinion, that fracture within the capsule of the neck of the thigh-bone never did unite by osseous deposit, for, in this instance, the neck had become absorbed, and the head of the bone had fallen down upon the shaft. The union that had taken place had resulted from a deposition from the shaft of the bone, and not from its neck; but he denied that union, except that resulting from the attraction of cohesion, did exist at all. He did not deny that under certain circumstances osseous union of the neck of the femur within the capsule could take place; but for this to be effected it was necessary that the periosteum should be entire, for the purpose of depositing provisional callus, and that the limb should be allowed to remain for a long time in an undisturbed position, with the extremities of the fractured portion in contact. Thirteen or fourteen months would at least be required to arrive at so desirable a conclusion. All the articulating surfaces were subject to the same laws, and the same difficulties were experienced, if attempts were made to produce an osseous union where they had been fractured. The reason for this was obvious, it was a law of nature, and not accidental; the vessels supplying these parts had a particular duty to perform, that of affording a supply of the synovial fluid, and therefore could not be devoted to the formation of callus. The same difficulties in union of fractures of flat bones was experienced, because the vessels of the neighbourhood had to supply important organs, the functions of which would be interfered with, provided their vascular supply was devoted to a reparative process. We contended then Sir A. Cooper was right in asserting that union of fracture of the neck of the femur by bone was the exception to the general rule. He had been to see all the cases which had been announced as those of union by deposition of bone, and he had generally found that the fractures had occurred in old people, and the bones on both sides were the same, the necks of the thigh-bones having become absorbed.

Sir B. BRODIE, having had the preparation taken from the bottle and handed to him, gave it as his opinion that the union was osseous, and not of such a kind as would have been presented, had the deposit, according to Mr. Cooper, taken place from the shaft of the bone and the trochanter. The shortening process consequent upon old age, had doubtlessly been going on to a considerable extent, and this probably both before and after the receipt of the accident. He believed that it was not doubted that union of the neck of the thigh-bone within the capsule did take place in certain cases, but of course it was by a different process from that which was obtained, in fractures of the shafts of bones. Some years ago he had made some experiments on the mode in which fractured bones united, and he had come to the same conclusion as Dupuytren, without having been aware that he had been pursuing the same inquiry. The result of these experiments had satisfied him that union at first depended more upon the neighbouring cellular tissue than upon the periosteum, whatever part the latter might afterwards play in the process. He might take this opportunity of remarking, that he had found the most successful plan of treating ununited fracture, to be that pursued by Mr. Amesbury, and consisting in the binding of the limb in an immovable apparatus, by which the extremities of the fractured bone were kept in a state of forcible apposition for a long period. The plan was a very painful, but a very successful one. He had succeeded in procuring union, by this mode of proceeding, in one case, in which the fracture had been ununited for two or three years, and a seton had been passed through it without benefit, the arm remaining dangling and useless. In the experiments he had

alluded to, only one case of union by ligament occurred, and this was in a fracture of the femur of a rabbit. He had endeavoured to account for this deviation from the general rule, but had not succeeded. He had also instituted some experiments with the view of preventing union, but had not been successful in his efforts. It was true that he had found that by placing a ligature on the femoral artery, the reparative process in a fracture of the thigh-bone had been delayed in its commencement for a week or a fortnight, but at the expiration of that time union went on as though no such operation had been performed.

Mr. Liston had been shown a case of bony union in the neck of the thigh-bone by Sir A. Cooper. In this case the periosteum had been left entire.

Mr. B. Cooper referred to some experiments on the mode of union in fractures of "flat bones," as performed by Mr. Meade, and detailed by him in the last volume of the Society's Transactions. The bone chosen for the experiments was the scapula: now he, Mr. Cooper, thought this was the worst bone that could have been chosen for the purpose, inasmuch as it was not, physiologically speaking, a flat bone, nor was it subject to the same laws in the process of union as flat bones were. Without wishing to disparage the labours of Mr. Meade, he thought this objection fatal. With respect to the effect of tying the femoral artery on the union of fracture of the thigh-bone, he would relate a case. A man was admitted into Guy's Hospital with compound fracture of the femur; there was so much tension of and injury to the soft parts, that it was thought unadvisable to put the limb in splints. During the night spasm came on, and the femoral artery was lacerated by a portion of the splintered bone coming in contact with it. A ligature was placed upon the vessel, and the fracture united so quickly, that Mr. Key remarked of the case, that the quickest way of producing union of fracture of the femur, appeared to be by tying the femoral artery.

OBSERVATIONS ON THE IMPROPER USE OF OPIUM IN ENGLAND, BY JULIUS JEFFREYS, ESQ.

This paper had for its objects the pointing out the great and alarming increase (as it appeared to the author) of opium-eating in England, and to solicit from the society some declaration which might have the effect of discouraging such practice. The author depends for his proof of the increase of opium-eating, upon the Custom-house returns of the quantity of the drug imported into England in each year, from 1820 to 1838 inclusive; by which it would appear that a very considerable increase had been experienced; the quantity entered for home consumption in the former year having been 16,169 lbs., and that in the latter 131,204 lbs.

Dr. Johnson considered that the increased consumption of opium in this country was to be explained in part by the increase in the population, and by the greater frequency of late years of those maladies in which opium is employed. The author of the paper had taken rather a limited view of the subject, by considering that opium was used merely as a stimulant. Sydenham had said of opium, that if it were expunged from the pharmacopœia, he would give up the practice of medicine. Opium was used more as an anodyne than a stimulant, even in those persons who did resort to it habitually. They used it to relieve irritations and unpleasant sensations of the nervous system and stomach. The author underrated the quantity used in the manufacture of acetate and muriate of morphia in this country, which, however it might be supposed to the contrary, did not all come from France.

Sir B. Brodie remarked, that it was frequent enough for surgeons of hospitals to have gin-drinkers under their care—this class of persons did not decrease in number; it was, however, very rare to admit an opium-eater, he had not of late known it to be more frequent than it was formerly.

Dr. Addison could bear his testimony that there was not much opium-eating among the poor patients admitted under his care at Guy's Hospital. He thought the abuse of opium was chiefly confined to the provinces, particularly to those districts in which marsh miasma prevailed. He had lately conversed with an intelligent gentleman, who had recently travelled over the greater part of England, and he had found that in many counties opium was not at all employed, while in marshy districts it was used largely. Even in these localities it was not, however, used simply as a luxury, but for the purpose of relieving the feelings consequent upon a residence in a marshy district, or to ward off and prevent the diseases liable to be contracted in such a situation. The increase in the quantity of opium consumed in this country might be explained in part also, by its being more frequently employed in medicine, as in inflammation, &c., than it used to be. He doubted whether it was politic in this society to promulgate any decided opinion, such as the author suggested, on the subject.

Dr. Webster believed that both in London and the country, opium-eating was carried on to a great extent, but being a secret vice it was difficult of detection.

Dr. Kingston, in his dispensary practice, had very rarely come into contact with persons who used opium as a luxury.

Dr. Ashwell thought the paper had not sufficiently accounted for the increase of the consumption of opium by the increase of the population. He had lately had opportunities of making accurate inquiries in some

large manufacturing towns, on the question of the consumption of opium by the poorer inhabitants, and he had found that no such increase as that mentioned in the paper had taken place.

Mr. VANDERHUFFEN, in addition to the other causes which had been assigned by members for the increase in the quantity of opium imported into this country, mentioned the exportation of it again in various forms, in order to supply the different new colonies, founded of late years.

Sir B. BRODIE did not think it was good policy for that society to pass any resolution on the subject. Indeed, harm might be done by such a proceeding. Opium-eating, however, could never demoralize the habits and shorten life, as gin-drinking did. If he had to choose between the two, he should prefer the use of opium; for a man under its influence had not the incentives to the commission of crimes, which the spirit-drinker had.

Before the society adjourned, it was ordered, that the council be requested to prepare, and cause to be presented to her Majesty, H. R. H. Prince Albert, and H. R. H. the Duchess of Kent, three several addresses of congratulation on the late auspicious event of the birth of a Princess.

WESTMINSTER MEDICAL SOCIETY.

Saturday, November 21, 1840.

Mr. STREETER, President.

A VERY beautiful specimen of the femur, in a state of necrosis, was exhibited to the society by Mr. Brooke. The same gentleman also showed to the members the instrument which he employs in the division of the recti muscles in strabismus, and described by him in a recent Number of THE LANCET. A desultory conversation followed, which did not offer anything worthy of publication.

Saturday, November 28.

Mr. GREGORY SMITH, President.

WATER-STROKE.—AIR IN THE PERICARDIUM.—PITTING IN SMALL-POX.

Dr. G. BIRD related the following case:—E. G., aged three, was admitted under his care at the Finsbury Dispensary, on November the 9th, 1840. This child became the subject of hooping-cough in May last; the disease was accompanied with pneumonia, and after severe gastro-intestinal irritation, which materially protracted the convalescence, she slowly recovered. On the 9th November, when brought to the dispensary, she presented the following appearances:—Her face was flushed with a circumscribed, vividly red patch; her skin dry, but not remarkably hot; the pulse rapid and small; lips dry; tongue dry and red at the edges; teeth clenched and opened with difficulty; abdomen rather tumid and flatulent; no intolerance of light. He learnt that she had been restless during the last few days, and her motions pale, offensive, and lumpy. She was ordered a mild alterative three times a-day. This produced an apparent alteration in her symptoms, and she voided, during the subsequent forty-eight hours, an enormous quantity of ascarides with the motions, which were parti-coloured and streaked with blood. On the 14th a sudden change took place, and Dr. Bird found her lying upon her back uttering incoherent moans; the pupils were widely dilated, and unacted upon by light. There was a circumscribed hectic flush on each cheek; she faintly rolled the head from side to side; the right arm and leg were rigidly extended; the hand clenched and toes curved; the left arm and leg were constantly tossed about wildly, the hand and foot being in the same state as those on the other side. There was no abdominal distention; the teeth were firmly clenched; the pulse too rapid to be counted; all consciousness was gone. On being raised from the bed the whole body felt rigid; this fearful change had come on in the night after a severe attack of sickness. A blister, followed by mercurial ointment, was applied to the back of the neck, and acetic acid to the head. A purgative powder, consisting of calomel and colchicum, was administered every four hours, and an injection, consisting of spirit of turpentine and gruel, ordered directly. In the evening a slight improvement had taken place, the pulse was about 160; the skin moist and soft, but still hot; she slept calmly, but moaned when disturbed. On the following day slight squinting came on; four leeches were applied to the temples; the enema was repeated, with the effect of voiding a viscid green evacuation; she appeared totally insensible; the jaws so firmly clenched, that nothing could be forced down the throat, so that only one dose of medicine had been given her, and it was doubtful whether this had been swallowed. A few hours after violent convulsions came on, in the midst of which she expired. The body was examined twenty hours after death. There was no appearance of emaciation, in fact, rather the reverse. On reflecting the scalp, the sutures of the skull were all beautifully visible, being marked by a vividly red line. On raising the calcarium, the frontal bone separated from the parietal without any force being applied. The dura mater and arachnoid were healthy; the cells of the pia mater were distended, with a fluid giving a gelatinous appearance when covered by the arachnoid. At the base of the skull, espe-

cially about the pons Varolii, was considerable serous effusion. The substance of the brain was of unusual whiteness, showing scarcely any bloody points; the ventricles were distended with serum; the fornix and lower surface of the corpus callosum were softened to a pulp-like mass, and the septum lucidum was broken down. The quantity of serous effusion amounted altogether to about four ounces. The abdomen and chest were healthy, with regard to active disease; and tubercles were found in abundance in the lungs, liver, spleen, and kidneys; the liver was mottled on its convex surface with white patches. The pericardium was free from fluid, and remarkably distended with air: this, when allowed to escape, was inodorous, and was only remarkable in being present as a post-mortem phenomenon, whilst no other sign of putrefaction was manifest. This fact, taken with the observation of Dr. Guy, on the development of air under the pleura after death, was of some interest. The most remarkable circumstance of the case was the rapidity with which it progressed: ushered in with symptoms of infantile remittent fever, and, as soon as head symptoms were manifested, running through its course in sixty hours. The case was similar to those described lately by Gölis, under the name of wasserschlag, or water-stroke, the apoplectic hydrocephalus of some authors.

Mr. STREETER remarked, that parents allowed their children's bowels to be neglected for a very long time; he supposed that in Dr. Bird's case chronic disease had been going on for some time. He regretted that the spine was not examined.

Mr. WADE had witnessed some few cases in which acute hydrocephalus had taken place suddenly. In some of these vomiting had existed for a few days previous to the acute attack. He suspected that chronic inflammation had been going on for some time, and had terminated suddenly in the effusion of serum.

A MEMBER inquired, whether the society had had any experience in the use of the mercurial ointment, as an application to prevent pitting in small-pox.

Mr. WADE had not tried mercurial ointment, but had used the solid nitrate of silver in the papular state of small-pox, and had found it useful in preventing the formation of pus; he had used the mercurial ointment in furunculus with good effect. He had noticed the good results of a few punctures in small-pox, by relieving distention of the face.

Dr. G. BIRD had found, in a few cases, that the tendency to pit in small-pox was prevented by the evacuation of the pus from the pustule.

ROYAL MEDICO-BOTANICAL SOCIETY.

Wednesday, November 26, 1840.

Earl STANHOPE, President.

THE DATURA FASTUOSA.

A PAPER was read from Dr. Arnold on the datura fastuosa. This plant grows very abundantly in Jamaica, in which island it is used for a variety of purposes, particularly as an external application in gout, rheumatism, and neuralgic affections. Dr. Arnold had discovered it to possess the property of dilating the pupil in rather a curious manner. Two of his children were amusing themselves in a garden in which this plant grows, by striking the petals of it against their closed hand or forehead, by which means a loud report was produced. One of the children, a little girl, ten years of age, complained all at once of being giddy, and symptoms of concussion, with a very dilated state of the pupil, came on. All the symptoms but that involving the eye soon disappeared, but the dilatation of the pupil remained for twenty-eight hours. He found afterwards that the insertion of a drop of the expressed juice into the eye, near the inner canthus, produced dilatation of the pupil in both of the children. Dr. Baucroft and Dr. Parnell had tried the plant in the public hospital with the same result.

BRITISH MEDICAL ASSOCIATION.

Exeter Hall, December 1, 1840.

Dr. WEBSTER, President, in the chair.

THE minutes of the last meeting were read and confirmed.

The thanks of the trustees of the British Museum were received for copies of Dr. M. Hall's oration.

A communication was read from J. H. Nankivell, Esq., secretary to the Cornwall Medical Association.

The motion of Dr. Webster, of which notice was given at the last meeting, having been seconded by N. M'Cann, Esq., was taken into consideration, when an amendment was made by H. Smith, Esq., and seconded by W. Eales, Esq., that the appointment of delegates from the association be postponed, which, on being put from the chair, was carried.

A considerable and important debate, in which Mr. Wakley took a prominent part, occupied the attention of the meeting as to what should be the Bill of the profession to be introduced into Parliament, when, on the motion of W. Simpson, Esq., seconded by Dr. J. R. Lynch, it was resolved unani-

mously, "That a special meeting of the council be holden at Exeter Hall, on Wednesday, the 9th inst., at half-past three, P.M., for the purpose of coming to a decisive conclusion as to the principles and details of the Bill which should receive the support of this association."

The meeting then adjourned.

ASSURANCE COMPANIES.

The following circular has been drawn up at the request of the association by Dr. R. D. Thomson, and forwarded to the various offices. It is greatly to be desired that medical men, whether connected with assurance companies in a medical capacity, or as shareholders, or assurers, will support its prayer, when it is submitted to the respective boards:—

"*To the Directors of the Assurance Company,*

"Gentlemen:—I am instructed by the British Medical Association to communicate to you a copy of the following resolution carried by an unanimous vote at a meeting of that body held in Exeter Hall on the 8th October last, at which several hundred members of the profession were present:—

"'That the members of this association *again* pledge themselves to return all applications from life assurance offices unless accompanied by a fee.'

"The members of the British Medical Association are well aware that several offices are in the habit of remunerating the medical men to whom they apply for opinions relative to the health of candidates for assurance. But in respectfully addressing the directors of such offices as object to what the members of the profession consider merely a just return for services rendered, it may be proper to remind them that the information sought from the medical attendant of a person, proposing for an assurance, is *solely* for the benefit of the company; for in many instances the medical attendant, while he saves the company from the risk of a bad life by means which could not otherwise be obtained, deteriorates the prospects of his patient, and too frequently *injures* his own practice in the service of the company.

"In such cases it is impossible to expect remuneration from the patient, and thus the time of the medical attendant is unprofitably occupied for the benefit of the company.

"It has been suggested that all offices, before receiving a proposal for assurance, might require a deposit from the proposer, and that the sum deposited might be allowed for the remuneration of the medical attendant of the assuree. This practice, if the information be correct, is adopted by all the assurance companies of Glasgow, and is reported to work well. It is almost superfluous to add, that if this method were uniformly followed, much trouble would be saved to the officials connected with the assurance offices, and some expense to the companies.

"The British Medical Association, in bringing this important subject under the notice of the directers of assurance offices, trust that, from the well-known intelligence and liberality of these gentlemen, the claims of the medical profession will meet with due attention.

"I am instructed by the British Medical Association to request that you will do them the favour to address your answer to me as soon as convenient. I have the honour to be, Gentlemen, your obedient servant,

"Signed by the Secretary."

ON THE

MORAL TREATMENT OF THE INSANE.

BY PHILALETHES.

BEFORE I proceed to the proper subject of this note, I wish to revert to the "mode of feeding the insane." In my last I proposed that the *pharyngeal* tube be passed through the mouth; but this proceeding implies the previous operation of forcibly opening the mouth, and retaining it open by means of a piece of wood of the proper form; and it would be well if this could be avoided. Now, this proceeding may be avoided altogether, by passing the tube (a smaller one) along the floor of the nostril. Here there are no nerves to be specially avoided; the nasal branches of the trifacial are distributed above this part, and the palatine branches below; the fauces and the glottis are equally avoided. The tube, which should be properly curved, is passed with the utmost facility, and without the slightest danger of any kind, until it reach the uppermost part of the pharynx; it is then directed downwards, until it passes to within the constrictors. Guided by anatomy and physiology, this operation is the simplest, the easiest possible, and inflicts scarcely a sensation, certainly no uneasiness, on the patient.

But to proceed to the subject of the proper treatment of the insane, in regard to restraint. I have a young friend, a favourite pupil, who is subject to terrible attacks of epilepsy. These attacks are followed by maniacal delusions. In these he is tempted to commit homicide or suicide. In his lucid intervals, he deplores their terrific tendency, and implores his friends to *secure him against himself by instantly putting on the strait-waistcoat* on all such occasions. Now, I ask you—I ask every reader—whether this young gentleman's wishes, so expressed in his lucid moments, are to be neglected when he is beside himself? Would it be just towards him or his friends?

Another case is that to which I have already adverted. A patient will contend for hours with persons who are attempting, in the mildest efficient manner, to hold him, who shall be calmed in a few minutes by being restrained and morally subdued by the strait-waistcoat. You may, assuredly, place such a patient in a room, the walls of which are so protected by soft materials, that he cannot hurt himself. But then he gets no repose, no sleep; he is found, in the morning, in the same state of violence, in the same erect position, as those in which he was left the night before—pallid, worn out, his feet cold, his ankles swollen. All this sad state of things would have been prevented by the strait-waistcoat; he would, at least, have reposed; he would, at least, have been kept warm. Can any one doubt which is the more humane treatment of the two?

As I said in my last, those gentlemen who have espoused the non-restraint treatment, have passed to the opposite extreme from that which has been left—a much more creditable one certainly, but still an extreme.

Once more I must say, that what we want is, neither a restraint system, nor a non-restraint system, exclusively, but a system conducted by persons of education, of moral and intellectual education, of the education and feelings of gentlemen! With such persons, and with such persons only, are the insane secure from ill-treatment, with, or without, restraint.

I have visited many asylums. I was recently over that of Charenton, with M. Esquirol, and accompanied by M. Louis. This institution is far from deserving the praise bestowed upon it. Of many scenes, M. Louis exclaimed emphatically, "j'en suis navré!" and certainly they were any thing but creditable. The other day I was over that of Hanwell, and I was struck with admiration at the recent efforts made by its physician, its matron, &c. But I have seen nothing which to my mind has worn the happy air of the asylum at Moorcroft, conducted by the Messrs. Stilwell. Here are three educated gentlemen, in constant attendance, *devoted* to their charge; here are *no keepers*; here the principle of treatment is—that of insisting upon *a habit of behaving with strict decorum*—at table—at their amusements—in their walks—in their daily intercourse. This habit is kept up by mild but efficient discipline; it is caught by the newcomers. This is the only restraint, except when necessity and humanity equally require some decided measure of that kind. But the patients *must* conduct themselves with gentleness towards each other; otherwise, they are subjected to the disgrace of dining, and taking their other meals alone! They are, usually, speedily restored to the general society. Your readers will readily figure to themselves, the effect of this mild, but continued, and, I may say, gentlemanly treatment. It is as the constant dropping of water which eventually excavates the stone. The train of insane ideas is broken; the causes of excitement are removed; a habit of quiet is established; amusements (not labour) are actively pursued. It is a happy scene, even. But what is more, it constitutes the most efficacious mode of *cure*; for, under it, sixty per cent. have recovered!

I have a right, Sir, to speak thus, for my own brother (though his case is one of hemiplegic paralysis, not of lunacy,) is an inmate of that asylum.

November 30, 1840.

SQUINTING CONTROVERSY.

MR. ELLIOT'S REJOINDER TO MR. DUFFIN.

To the Editor of THE LANCET.

SIR:—In the first communication that I forwarded to you, and which appeared in THE LANCET of Sept. 19, I stated, as the first of four inferences, that "strabismus could not be regarded as confined to one eye, since, when the sound eye was closed, the affected one became straight; and, on raising the lid of the former, it was found inverted, though the position of the eyes was soon reversed again."

When I made use of the term "sound eye," it was meant to express, as shortly as possible, that eye which was looking at, and directed straight towards, any object placed before the face of the patient, when the opposite eye was inverted or everted, according to the kind of strabismus. That *both eyes* were, in my opinion, concerned in all cases of strabismus where no muscular paralysis existed, was sufficiently clear from the inference quoted above; as well as the term sound eye might be quibbled upon, from my calling it, in your Number for Oct. 31, "the so-called sound eye," and the "apparently sound eye." The result of the opinion mentioned in the inference was, the practice that I adopted of dividing the corresponding tendon of the other eye as the second step in the operation.

In all cases, then, in which the squint of the eye first operated on is not entirely removed by the division of its affected muscle, and of any associated fibro-cellular bands that may present themselves; and where the opposite eye is still directed straight towards any object placed before the patient, I operate forthwith on the corresponding muscle of the second eye, though no squint be perceptible in it, as ascertained by the position of the eye and the object looked at.

Now, whether this plan was ever adopted by Mr. Duffin in his practice, I have no means of ascertaining. That it was never once mentioned by him in any of his communications, until after my first paper ap-

peared, is evident to every one who will give himself the trouble of wading through his previous effusions. In my second paper (LANCET, Oct. 31), I ventured to affirm that Mr. Duffin had never adopted a similar practice (i. e., the division of the corresponding muscle of the second eye, to remove any "remaining" obliquity in the eye first operated on), notwithstanding his statement to the contrary, for such reasons as the following:—

1st, The circumstance of his never having, previously to the publication of my first paper, alluded to any double operation except once, and that in the case of a lady, on whom he practised it at her own request, in order to remove the squint of the second eye, which had supervened on the first operation, and where the eye first operated on was still natural. 2nd, His statement, in THE LANCET of Sept. 12, that, in 99 of 100 cases, the cure of the eye operated on was complete, after the division of some abnormal tendinous fibres, in addition to that of the muscle, which, according to him, constituted "the grand secret" of success; and that in some few cases (one per cent., I suppose), where a degree of squint still continued, Mr. Liston's plan of the partial or complete division of the superior or inferior rectus, or of both, was to be resorted to, as all that was necessary to complete the cure.

And now let me offer a few remarks on Mr. Duffin's modern plan of proceeding, or that which he has adopted in practice, or, at all events, has published subsequently to the appearance of my first paper. I shall quote his own words from your Number of the 7th instant, in order to contrast them with the statements and practice I have just referred to. He there says,—"That Mr. Elliot's claims and my own, therefore, may no longer be confounded, I beg again to assure your readers that I do not divide the adductor tendon in "sound" and unaffected eyes. But that, in preference to dividing any other than the adductor, when the section of this muscle alone does not prove successful, I recommend endeavouring to remove the remaining inclination inwards (attributable to an adopted action of the inner fibres of the superior or inferior rectus, and acquired, in all probability, by habit), by first operating on the other eye; and which, in the vast majority of cases,* is alone sufficient for the removal of the remaining obliquity. Be it understood, however, that in such cases I never operate on the second eye, unless I feel perfectly satisfied that it also has become involved in the production* of the strabismus. Indeed, I believe it will very rarely be found that the distortion is confined to one eye, when any inclination inwards remains after a well-performed operation."

Here, surely, the very plan which was first published by me, with sufficient detail, in THE LANCET of Sept. 19, is plainly enough sketched by Mr. Duffin in that of Nov. 7th; a plan never even hinted at by him in your pages, until he had read over and quoted from my first paper; a plan adopted to remove the "remaining inclination inwards" of the eye operated on, caused by the superior or inferior rectus, or both, by operating on the other eye, and resorted to now, mark, "in preference to dividing" the superior or inferior rectus, causing that "remaining" inversion; which latter practice Mr. Duffin himself, as already stated, recommended to be forthwith adopted in the "some few cases" (one per cent.?) where division of the muscle and tendinous or fibro-cellular bands of the squinting eye failed to cure its obliquity. From the lines just quoted, it is, then, evident that Mr. Duffin avers that he himself operates, in cases requiring it, on the sound or non-squinting eye, when he "feels perfectly satisfied that it is involved in the production" of the "remaining" obliquity of the other, though not involved in the obliquity itself.

When did this change take place in Mr. Duffin's opinion and practice? When did he adopt the "unsurgical" plan of dividing the adductor of the eye, which was involved in the production of the "remaining inclination inwards" of the other eye already operated on, in preference to the division of the superior or inferior rectus of the still affected eye, which he had previously stated might be requisite "in some few cases?" Certainly, I cannot but believe, after he had had an opportunity of seeing its results mentioned, as practised by myself, and seen by numerous practitioners of at least equal professional acumen to that of Mr. Duffin himself, if we are to judge of him by his writings on this subject.

The operation on the corresponding muscle of the second eye I first performed in the month of August. Mr. Duffin, in his paper dated Sept. 1, and published in THE LANCET of Sept. 12, continues, on the contrary, to advocate a series of operations confined exclusively to one eye, as practised by Mr. Liston.

Mr. Duffin, however, in THE LANCET of the 7th instant, avers, that he has occasionally operated on the second eye, under circumstances already recited. That the se-

* If any credit can be attached to such conflicting statements, what proportion per cent. could possibly require recourse to the operation (on the second or sound eye) now under dispute? A unit, or less. What, therefore, can by any possibility have been the amount of Mr. Duffin's experience of that operation, even on his own showing?

* Observe this word; not in the strabismus itself.

cond eye operated on by him was the "sound" eye, is evident from the obliquity being mentioned as existing in the other, and caused by its superior and inferior rectus.

If Mr. Duffin can suggest a better term than "sound," I shall be happy to adopt it. Its meaning, when used by myself, must be clear enough to any candid reader, on referring to the "inference" mentioned at the beginning of this communication. And it must have been sufficiently evident to every one (except Mr. Duffin), after reading my previous papers, that an operation on the "sound" eye, or the eye not affected with obliquity, was undertaken by me on the supposition that the "remaining inclination inwards" of the other was dependant on the "sound" eye (for I shall still use the term in lieu of a better) being "involved in the production," as Mr. Duffin expresses it, of that inversion.

That Mr. Duffin has adopted a practice, in cases requiring it, which I have little doubt will become general in time, affords me pleasure; as also the approval he thought fit to bestow on my first paper, and its "very judicious title," as he termed it, which appeared in THE LANCET of Sept. 19. But that he should endeavour to palm upon the profession any claims of his own to originality, after the appearance of his former papers, seems anything but "judicious" on his part.

Mr. D. says that, in my hands, he doubts not the division of the two abductors may be followed by success, though, when he divided the abductor of a dog, the pupil became inverted.

What does he mean by so contemptible an argument as this? Did the dog "squint?" Was there any existing deformity to remove by the operation on its eye? Mr. Duffin might just as well object to the section of the tendo Achilles of a distorted foot, because the division of the same tendon in a healthy dog is followed by lameness of the animal.

The objection, too, raised by him to the division of the abductors, applies equally to that of the adductors. For what is the effect of dividing the adductor of a dog? Is it not followed by eversion of the eye? And has that circumstance deterred even Mr. Duffin from operating for the cure of strabismus convergens?

It is, however, no longer a matter of opinion, but a fact, witnessed by a number of practitioners (some residing here, some in the neighbourhood), that if the section of the abductor of an everted eye prove not sufficient, as was confessedly the case in fifteen persons operated on by Mr. Duffin, the effect of then dividing the abductor of the other or non-everted eye, is equally satisfactory with that of the division of both adductors in the requisite cases; in other words, to make the statement quite clear to Mr. Duffin, is to complete the parallelism of the optic axes. In none of my cases, where any eversion remained after the first operation, did the slightest "permanent" inversion result from the division of the second abductor. After the division of both, the power of abducting each eye existed in a natural degree, and the cure was, of course, extremely satisfactory.*

Had Mr. Duffin's fifteen unfortunate patients had the operation performed on both abductors at one sitting (for I lay stress on the exclusion of an interval beyond a few minutes), I do not hesitate to express my conviction, that the improvement would have been—in every case free from muscular paralysis—very different, indeed, from the "trifling" results he admits he obtained, and which deter him from recommending the operation in such cases in future.

There appears to me to be, in certain instances, the same reason for dividing the second abductor, as, in others, for dividing the second adductor. In strabismus convergens, the "remaining inclination inwards" of the eye already operated on is curable by the division of the adductor of the "sound" eye, which is "involved in the production" of the other's "inclination inwards," but is not inclined inwards itself. In strabismus divergens, the "remaining inclination" outwards (as I shall call it, to make it intelligible to Mr. D.) of the eye whose abductor has been divided, is curable by the division of the abductor of the "sound" eye, which is "involved in the production" of the other's inclination outwards, but is not inclined outwards itself. In such cases, respectively, "remaining" inversion is due to the action of the inner fibres of the superior or inferior rectus, or of both, "remaining" eversion to that of the outer fibres of the same muscles.

Mr. Duffin has, unhandsomely enough, insinuated that the operation was imperfectly performed in my first cases. The proof of the operation being complete was, as I mentioned in my first paper, the free and complete power of eversion of the eye after, but not before, the operation, as also the perfect cure obtained in such cases by the division of the corresponding tendon of the other eye; which results could not have followed, had the operation on the first eye been incomplete. His observations, however, on such a probability, I do not feel to be worthy of the least notice as far as they respect myself, were it not that the same objection might be extended by any captious quibbler to the imperfect results of operations performed, on one eye, by such masters of their

* For the satisfaction of so incredulous a person as Mr. Duffin, I beg to state that Wm. Irving, Esq., surgeon, Penrith, Dr. R. Atkinson, and Dr. Wm. Elliot, Carlisle, can vouch for the accuracy of this statement.

art as Liston, Roux, and Guerin, and noticed by me in your Number of Sept. 19.

If a "smile" be elicited in the course of this correspondence at all, it must be at the expense of Mr. Duffin himself, for adopting a practice of which he "apparently" cannot see the reason, otherwise he would have brought forward some more applicable simile that that of the two limbs, and some more pertinent analogy than the result of an operation on the normal eye of a dog. In case Mr. Duffin should forward any more remarks to THE LANCET on any of my papers, I should feel obliged to him if he would quote me correctly; when such statements as that I had "met with twenty-five exceptions to the general rule," would be no longer falsely adduced. I trust, for his own sake, this has been a mere oversight.

In concluding, let me observe, that the operation has, on different occasions, been performed by me in fifteen seconds; and if success be taken as a test of its completeness, the cases I have had have all been perfectly cured since the adoption of the plan I have suggested, in the cases requiring it. These last, since I commenced that proceeding, have amounted to fourteen cases in forty-seven; in which fourteen there was a "remaining" obliquity of the eye operated on. Of the others, some were cured by the single operation, and the remainder by the operation on the second eye, on account of it having, in turn, become inverted, after the cure of the other.

Regretting that my own vindication has compelled me to enter into these details, I am, Sir, your obedient servant,

THOMAS ELLIOT.

23, English-street, Carlisle,
Nov. 10, 1840.

REPLY OF DR. FRITH
TO A
Correspondent in THE LANCET *of July* 11,
ON THE
PER-CENTAGE SYSTEM.

To the Editor of THE LANCET.

SIR:—In your Journal of the 11th of July, you have inscribed a circular, or notice, stating that I attend in Fleet-street to give advice to all persons who may apply. I see nothing improper in the printing or in the publishing of that circular, but of the comments much might be said. The first part of the comment, "disreputable partnership," appears to emanate from yourself; and, as it might have easily been proved that no partnership did, or does, exist, and, if it did, could be no business of any one, I think it *too bad* of an Editor to lend himself to denounce an individual, who does not seek to injure or interfere with any one.

The further comments are stated to be from a tradesman; but I am of an opinion that no respectable tradesman would take that trouble, or interfere in a subject of the kind. All interferences of this nature arise either from interested motives, envy, malice, or uncharitableness; and as the tradesman in question appears to know nothing of me, or can have any interest in writing the article now referred to, I am led to believe it did not originate from a tradesman, but from some *professional person*, who was afraid he would lose a portion of his *potatoes and salt*.

Now, as to the course being "disreputable." Is it disreputable to go about doing all the good in your power? Is it disreputable to prescribe at the house of a respectable chemist and druggist? If it is, then you may include nearly the whole body of medical men, physician, surgeon, and apothecary, even men who have been held up in your Journal as the greatest men of the day.

In summoning up this mighty offence, for which your correspondent calls aloud for punishment, permit me to ask and answer what the offence is? A respectable chemist and druggist, who does not wish to make himself amenable to the law, by undertaking to prescribe for those who apply to him, arranges with a properly-qualified person for that purpose, one who has been more than twenty years in the profession, and who has the gratification and satisfaction of knowing that more than an isolated person has been raised in the profession through his means to respectability and to competency.

I must now ask, of what is this regularly-qualified gentleman guilty? I am of an opinion he is guilty of no offence, and that his conduct is commendable, for, instead of demoralising the minds of the public, such a course will encourage a laudable desire to pay a something commensurate to their means, in preference to seeking charity at the various public institutions, where advice and medicine are many times indiscriminately given away for nothing. It has ever been my opinion, that a greater good is effected by encouraging every one to depend more upon their own energies, than upon the resources of charity, and I think the principle will hold good, in every circumstance either of private or of national polity.

I did not see the remarks to which the preceding refer until this day, November 17, otherwise I should have forwarded an answer before; and I account for not seeing it to a severe *domestic affliction*, that precluded me from taking notice of anything more than that which was forced upon me at the time. On the principle of better late than never, I request the insertion of this letter in your Journal, and at the same time state, that not being envious of other gentlemen being considered writers, &c. &c., in a great public Journal, and being desirous of not having

that honour myself in matters of this kind, I shall decline any further paper controversy, and conclude with the following quotation: "*Let he who is himself faultless cast the first stone.*" I have the honour to be, Sir, yours obediently,

THOMAS FRITH.

*** We are not responsible either for the grammar or composition of our correspondent, but are quite willing to give him an opportunity of explaining in his own way his medical proceedings.

THE KENSINGTON UNION.

To the Editor of THE LANCET.

SIR:—During a period of twenty-one years, in which I filled the office of parochial medical attendant of Fulham, I *never refused to attend a pauper, when summoned, with or without an order.* If the party were eligible, the document was obtained, and if not, I ceased or continued my attendance, according to the urgency of the case; I recommend my junior brethren to pursue the same plan; and, should they remain in office as long as I did, they will experience the pleasurable reflection of never having had a complaint against them.

I possess the united testimony of the clergy and laity of the parish in support of my assertion. I am, Sir, your obedient servant,

W. WANSBROUGH.

King's-road, Chelsea, Nov. 19, 1840.

A FOURPENNY VACCINATOR.

To the Editor of THE LANCET.

SIR:—In THE LANCET for Oct. 2nd, you inserted a copy of an advertisement for a vaccinator for the Hyde district of the Stockport Union, whose services were to be remunerated by *a* SIXPENCE *for each* SUCCESSFUL *case.* Doubtless your readers regretted the mistaken economy of the guardians of that district, careful of pence, but careless of the health of the community; and many, perhaps, thought that such an offer would be treated with contempt, by the members of an enlightened profession. But, Sir, I regret, for the honour of the profession, that such is not the case, for a Mr. Clubb, even sent in an offer to undertake the duties of vaccinator for that district at a lower premium, viz., *for* FOURPENCE *per head for each* SUCCESSFUL *case.* This Mr. Clubb is also the medical attendant to a society, the members of which pay to the funds *a* HALFPENNY *a-week each,* for all necessary medicines, attendances, &c., when illness attacks any or all of the members. He resides in Hazle Grove, near Stockport.

These clubs are very common in the north of England, and are called, *par excellence,* "Boards of Health!" These matters, on account of their importance, will, perhaps, attract the notice of the council of the British Medical Association. I am, Sir, yours, obediently,

H. H.

Nov. 20, 1840.

THE NEW VACCINATION ACT.—The Poor-law Guardians of St. Martin have appointed, as one of their vaccinators, a druggist, who holds the following valuable appointments:—"Chemist and Druggist to the Queen," "Agent for the West Middlesex Assurance Company," "Agent for the Yorkshire Life Insurance Company," "Sole West-end Agent for Albinolo's Ointment," "Agent for Swaim's Panacea and Vermifuge," &c. What will the doctors say to that?—*British Empire Newspaper,* Oct. 31, 1840.

UNIVERSITY COLLEGE HOSPITAL.

MALIGNANT TUMOUR INVOLVING PART OF THE LOWER JAW.

G. W., a tall, spare man, about seventy years of age, was admitted November 8, with a tumour on the right side of the lower jaw, of which he gave the following history:—He first noticed it about a year and a half or two years ago, when it was quite loose, rounded, and hard, like a nut, and neither painful nor tender. It was then situated under the base of the lower jaw, in the upper part of the neck. At first it increased very slowly, and, indeed, for several months after he first noticed its presence, it remained almost stationary. At the end of that time he began to feel shooting pains in the part, and he thought the swelling became larger. He accordingly showed it to a surgeon, who recommended bathing it frequently with salt water; this he had continued to do until lately. About five or six months ago, the increase in the size of the tumour began to be more evident, and since then the growth has been more rapid. The patient says, that twenty-one weeks ago the tumour was loose, and of very inconsiderable size; but soon after it begun to grow so rapidly, he found he could no longer move it about under the skin, as it was then firmly fixed to the jaw. For the last few weeks he has suffered more than usual, the pains being of a shooting, lancinating kind. Indeed, his sufferings have been so great, that he has come to town from Hull for the purpose of having the jaw removed, if possible. While on his journey, the skin over the lower part of the tumour burst, and a small quantity of curdy matter escaped. A similar fluid has been continually discharging itself since. On examining the face, the first thing which appears is a cicatrix, slightly puckered on the right side of the lower lip, the same side

as the tumour, which was left after removing a growth in that situation, a short time before the swelling under the jaw appeared. The patient says that he has not been much in the habit of smoking, and does not know any cause for the growth in the lip, which commenced about three years ago with a small ulcer, and gradually became larger and harder, until, at the period of its removal, it was about the size of a walnut. This tumour, like the present one under the jaw, was the seat of severe shooting pains. At present, the tumour is firmly adherent to the jaw, extending from near the symphysis over the outer and under aspect of the body of the bone, on the right side, and nearly half way up the corresponding ramus. The swelling is very hard, and only slightly uneven. At the lower and front part of it is a small ulcerated opening, through which a thin, sanious fluid, mixed with curdy matter, escapes. Behind this point the skin is rather red and boggy, and fluctuation is perceptible. The patient cannot open his mouth much more than is sufficient to get the little finger in. The teeth appear tolerably sound; the breath is very offensive; the tumour is not felt on the inner side of the teeth, but it pushes up the mucous membrane of the cheek on the outer side. The colour of the skin, which is firmly adherent all over the tumour, is generally heightened, and has somewhat of a dingy cast. No enlarged veins are seen. At the lower extremity of the tumour, over the situation of the carotid artery, is felt a small, hard gland, about the size of an almond. The pain in the jaw is often very severe, particularly at night and in the morning; and there is at all times a dull, heavy, aching sensation. The patient's sleep is very much disturbed in consequence. Appetite tolerably good; bowels open at present, but have been rather irregular; the patient has no headach or giddiness; his breathing is not impeded by the tumour, though deglutition is performed with some little trouble.

Mr. Liston observed, that this was a case in which any active surgical interference would not be admissible. He considered the tumour to be of a carcinomatous nature, commencing in the glands of the neck, from the presence, probably, of a cancerous tumour of the lip of that side. It was quite evident, from the history of the case, that the disease was not one of the lower jaw, although that bone had become implicated secondarily, and now, probably, involved in the disease. The rapid growth of the tumour and the lancinating pains which were complained of, almost from the first, were sufficient, Mr. Liston said, to make a surgeon very cautious in interfering. There would be no great difficulty in removing the disease, but from its nature the chances would be that, in a very short time, it would commence afresh in some of the neighbouring lymphatics.

Nov. 15. The patient left the hospital for the country, being anxious to get back again when he found that the tumour could not be removed.

The swelling has decidedly increased since he has been in the hospital, and another opening has been formed in the skin by ulceration, behind the former ulcer.

POPULAR LECTURE ON PHYSIOLOGY.

Dr. Mantell, of Clapham Common, delivered a lecture on the physiology of the nervous system, on Friday last, in aid of the funds of the National School of Clapham, which, notwithstanding the tempestuous state of the weather, was attended by upwards of five hundred of the principal persons in the neighbourhood. The lecture was illustrated by dissections of the brain and spinal marrow of rabbits, and other animals, and was received with great attention, and loudly applauded at its close. We have before had occasion to notice with approbation, Dr. Mantell's successful efforts at Brighton, to familiarise the public with the philosophy of our profession. If others, with like talents and acquirements, would adopt his example, much might be done towards raising the profession to the rank that it ought to hold in the public mind. Popular expositions of medical subjects would contribute greatly to the destruction of quackery, and diminish the attempts of the poor-law commissioners to degrade the profession.

BOOKS RECEIVED.

Lectures on the Morbid Anatomy of the Serous and Mucous Membranes; in two volumes. By Thomas Hodgkin, M.D., &c. &c., formerly Lecturer on Morbid Anatomy at Guy's Hospital. Vol. ii., Part I.

On the Mucous Membranes. Simpkin, Marshall, and Co., 1840, 8vo, pp. 541.

A Treatise on Stricture of the Urethra; containing an Account of Improved Methods of Treatment, with an Appendix on Dilatation by Fluid Pressure in the Treatment of Urinary Calculus and other Diseases. By James Arnott, M.D. Second Edition. Sherwood and Co., 1840, 8vo, pp. 234.

Practical Remarks on the New Operation for the Cure of Squinting. Illustrated with Lithographic Engravings. By Edward W. Duffin. Churchill, 1840, 8vo, pp. 147.

Practical Observations on the Pathology and Treatment of the Strictures of the Urethra; with Cases. By Robert Wade. Churchill, 1841, 8vo, pp. 149.

An Introductory Lecture on Surgery, delivered Nov. 4, 1840. By James Miller,

F.R.C.S.E., Surgeon to the Royal Infirmary, Edinburgh, Lecturer on Surgery, &c. Blackwood and Sons, Edinburgh, 1840, pp. 23.

An Address to the Medical Practitioners of Ireland on the subject of Vaccination. Second Edition, with a Plate and Appendix. By Samuel B. Labatt, M.D., Secretary to the Cow-pock Institution, &c. Dublin: Hodges and Smith, 8vo, pp. 202.

A Discourse on the Phenomena of Sensation as Connected with the Mental, Physical, and Instinctive Faculties of Man. By James Johnstone, M.D., Lecturer on Materia Medica and Therapeutics at the Royal School of Medicine and Surgery, Birmingham. London: Churchill, 1841, 8vo, pp. 264.

A Practical Treatise on the Bilious Remittent Fever, its Causes and Effects, with illustrative Tables and Cases, on the Temperature of the System in the Febrile Diseases of Jamaica; to which is added, Medical Topography of the Different Military Stations in that important Colony. By W. Arnold, M.D. London: Churchill, 1840, 8vo, pp. 320.

Descriptive Catalogue of the Preparations in the Museum of the Royal College of Surgeons in Ireland. By John Houston, M.D., M.R.I.A., Curator of the Museum. Vol. ii. Pathology. Dublin: Hodges and Smith; London: Renshaw, 1840, 8vo, pp. 604.

Thesis on the Nature and History of the Plague as observed in the North-Western Provinces of India. By Frederick Forbes, A.M., M.D., of the Bombay Army. Edinburgh: Maclachlan and Co.; London: Allen and Co., 1840, 8vo, pp. 102.

Discourse on the Enlarged and Pendulous Belly, showing it to be a Visceral Affection, and attended with many Important Consequences in the Human Economy; with Observations on Diet, &c. By Richard Frankum. London: Longman and Co., 1841, 12mo, pp. 75.

TO CORRESPONDENTS.

Communications have been received from *Dr. Cookson*, *Messrs. Place* and *Clay*, *Alpha*, *Justitia*, and *A Subscriber*, and shall receive our earliest attention.

If *Mr. Gardiner* feel himself aggrieved by any report of his system which may have appeared in this Journal, the proper course to pursue would be to put his views in a plain and intelligible form, so that they may rest upon their own merits. The testimony of the faculty in favour of an unexplained theory is wholly valueless; and a remedy in which the constituents are kept secret, Mr. Gardiner must be quite aware belongs to the class of quack processes. We must decline to insert his letter.

Veritas, *A Kensington Surgeon*, *J. W.*, *S. C.*, *A Curious Observer*, *M. D.*, and others on the same subject. Mr. Wildbore was selected by *the jury and summoning officer*, and *not by the coroner*, who did not know that there was such a gentleman in existence as Mr. Wildbore, until he appeared at the inquest to give his evidence. It is *not true* that Mr. Wildbore swore, at the inquest, that he was a member of the College of Surgeons. *He was not asked the question.* The written official depositions prove that fact most indisputably. Such is the state of medical law in this country, that any man who practises as *a surgeon*, is held to be a legally-qualified *surgeon*, until he furnish proof to the contrary by *mala praxis*. The reporter of the proceedings of the Poor-law Commissioners, in the case of Elizabeth Friry, in the *Morning Herald*, has explained, in a note which appeared in that paper on Tuesday last, what happened at the inquest with reference to the summoning of the medical witness. After this explanation, the most blind and prejudiced must hold the coroner to be free from the slightest iota of blame. In fact, it is difficult to discover against whom condemnation should be levelled, excepting it be against the officers who have been already censured, and against Dr. Kay for his uncalled-for and most improper interference with the honest decision of a legally-constituted tribunal. The following is a copy of the note which was appended to the report in the *Herald*:—

"The choice of the medical man to open the body was left by the coroner to the jury, who appointed Mr. Badgley; but some doubts arising, after the coroner had left the inquest-room, as to that gentleman being a physician and not a surgeon, the choice was left to the summoning-officer, who took the warrant to Mr. Wildbore, believing him to be unconnected with either the parish or the union."—*Reporter M. H.*

A. B. may practise as *a surgeon* on shore, without adding to the amount of his qualifications.

Mr. George Bottomley.—The commissioners, according to the provisions of the Act, may confirm or annul any contract which may be made with medical practitioners under the provisions of that statute. A power more pregnant with mischief could not be well conceived, and one more extensive could scarcely have been constructed.